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ABSTRACT

The California study, based on data from a national survey, compared accuracy and completeness of information on 7,182 chronic health conditions of persons, 17 years of age or older, given in household interviews with diagnostic information given by group medical plan physicians. Overreporting referred to conditions reported in the interview which were not specified in similar words in the medical record. Underreporting referred to conditions reported with specific words in the interview which were not recorded in the medical record. Some of the findings indicated that estimated underreporting in interviews was 46.8 0/0; that estimated overreporting was 40 0/0; that conditions with low indexes of underreporting and overreporting included diabetes, central nervous system disorders, heart conditions, gallbladder disease, and absence of digits; that underreported conditions included mental illness of a specified type, menstrual disorders, and skin diseases; and that overreported conditions included asthma, hypertension, visual and aural impairments, and speech defects. Overreported or underreported conditions coincided with one patient-physician contact, whereas the proportion of comparative accuracy increased with increased patient-physician contact. Tables, samples of questionnaires, a sample of the physician visit record, a diagnostic record, and the sampling design comprise over half the document. (MC)



NCHS

Net Differences in Interview
Data on Chronic Conditions
and Information Derived
From Medical Records

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE Public Health Service

Health Services and Mental Health Administration



Vital and Health Statistics-Series 2-No. 57



Net Differences in Interview Data on Chronic Conditions and Information Derived From Medical Records

A methodological study of the completeness and accuracy with which chronic conditions are reported by health plan enrollees in household interviews as compared with information recorded by physicians.

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COOPERATION OF THE BUREAU OF THE CENSUS

Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the Health Interview Survey, the Bureau of the Census, under a contractual arrangement, participates in most aspects of survey planning, selects the sample, and collects the data.

Vital and Health Statistics-Series 2-No.57



FOREWORD

A continuing concern and effort of the National Center for Health Statistics has been to better assess the effectiveness of its survey data collection mechanisms. Through the means of household interviews, examination surveys, and record surveys, a large variety of data, some of it overlapping, has been collected. Program plans and objectives have made it imperative that research be conducted to evaluate the strengths and weaknesses of the various surveys and thus to concentrate the efforts on those objectives best performed in each particular survey.

Important questions with respect to interview surveys have continued to be How complete is the reporting of chronic conditions by household respondents? and What is the value of condition data collected by household interviews? A large-scale study was conducted in collaboration with the Health Insurance Plan of Greater New York to compare the information collected in household interviews with that found in existing medical records. (See "Health Interview Responses Compared with Medical Records," Vital and Health Statistics. PHS Pub. No. 1000-Series 2-No. 7.) This study probed many facets of the agreements and disagreements to be found in such comparisons. It also indicated the need for a more sophisticated study plan which would utilize a prospective record source designed to control for differences in communication between physician and patient, for the duration of the condition, and for some measures of the impact of the condition as correlates of the measures of completeness of reporting in health interviews.

Such a study was planned as a contract project with the extensive collaboration of the Stanford Research Institute, the Kaiser Foundation Health Plan (Southern California Region), Southern California Permanente Medical Group, the

U.S. Bureau of the Census, and the National Center for Health Statistics. The first report (Series 2, No. 23), is a description of the study, in which the chronic illnesses and impairments reported by a sample of persons in household interviews were compared with the chronic illnesses and impairments found in specially prepared medical records. The study population consisted of a sample of members of a prepaid medical and hospitalization plan.

The general objectives of the study were:

- Ascertaining the extent of reporting by respondents in household interviews of conditions for which medical care was sought over a period of 12 months.
- Relating the extent of reporting of conditions to some measures of communication between physician and patient; to the relative impact of the condition in terms of duration and number of physician visits; and to type of treatment.
- Experimenting with different versions of the health interview questionnaire.

This is the second report from the study and it deals primarily with overreporting and underreporting of specific chronic conditions in household interviews.

Dr. William G. Madow of the Stanford Research Institute served as project officer for this study and was responsible for the preparation of this report. Mrs. Louise Bollo served as nosologist, and Mrs. Geraldine Gleeson performed major editorial service in preparing the report for publication.

Elijah L. White Director, Division of Health Interview Statistics





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NET DIFFERENCES IN INTERVIEW DATA ON CHRONIC CONDITIONS AND INFORMATION DERIVED FROM MEDICAL RECORDS

William G. Madow, Ph.D., Stanford Research Institute

OBJECTIVES AND GENERAL FINDINGS

Background

As a part of its continuing program of studies designed to evaluate the accuracy and completeness of diagnostic information obtained by household interview, the Health Interview Survey contracted with the Stanford Research Institute to do a study comparing responses to health interviews with medical records. The population used for the study was a sample of the members of the Kaiser Foundation Health Plan (KFHP) Southern California Region-a large prepayment medical plan providing services through the Southern California Permanente Medical Group (SCPMG) and hospitalization through Kaiser Foundation hospitals. The data collection phase of the study consisted of completing medical records created specifically for the study and then interviewing the persons for whom these records were maintained.

Content of Earlier Report

The general findings of the study, together with conclusions and recommendations pertinent to the interview survey, are presented in an earlier publication issued by the National Center for Health Statistics entitled "Interview Data on Chronic Conditions Compared With Information Derived from Medical Records" (Vital and Health Statistics, Series 2, No. 23). That report also includes a description of the background and objec-

tives of the project and some of the problems encountered during the conduct of the study.

As in other evaluative studies of this kind, a principal finding was that a certain proportion of conditions listed in the medical records were not reported in the household interviews. In general the unreported conditions tended to be those for which there was little, if any, impact on the person involved. Respondents reported more fully on conditions important to them and reported less well on conditions of lesser subjective importance.

Most researchers, while doing their utmost to reduce errors of response, are aware of the fact that there are errors of reporting in two directions: understatement and overstatement. The costs and difficulties of eliminating response bias are often so great that researchers take advantage of the extent to which understatements and overstatements balance one another in individual estimates, i.e., the size of the net response bias. In some instances, relationships may hold up even when individual estimates are subject to fairly large errors of reporting. By considering only whether conditions found in the medical records had been reported in the household interviews, the earlier report considered the gross error of reporting in only one direction. No attempt was made to investigate the extent to which underreporting of conditions found in the medical records was balanced by overreporting of conditions in the household interview.

The general purpose of the present report is to investigate the extent and magnitude of netdif-



ferences in the conditions reported in household interviews and those recorded in the Physician Visits Record Summary.¹

On the whole, while differences do exist, there is a tendency for the gross errors to balance out and for the net bias to be relatively small, particularly in view of the frequent vagueness and uncertainty in diagnosis and the lack of precision with which patients understand diagnoses. Even though only a small number of comparisons have been made here, it seems that the differences between chronic conditions in the medical records (PVRS's) for the study year and those reported in the household interviews are small enough that the findings can be used for some evaluative purposes. The large sizes of the gross errors, however, still require attempts to improve the data.

PLANNING AND CONDUCTING THE STUDY

Earlier Research on Health Interview Data

Recognition of the fact that information on illness collected by household interview does not reflect a complete and accurate account of all chronic conditions present in a population led to a number of research studies during the early years of the National Health Survey. In one of these studies, ² carried out by contractual arrangement with the Health Insurance Plan of Greater New York (HIP), the use of medical services for a condition during a given year was established from records maintained by HIP, and information collected by interviews was examined in relation to this criterion source. The record source in this study was the reporting document

(Med 10) which HIP physicians submitted to the central office in accordance with operational procedures of the Plan. These records, consisting of single-line entries on an administrative form. were used instead of the entries on the patient's clinical chart pecause the wide geographic dispersal of the medical groups and the variety of recordkeeping systems precluded the examination of all physician entries for a given individual. Since the Med 10 form gave no medical history, evaluation of symptoms, nor weighing of differential diagnoses, conditions and their chronicity were inferred from the records. While studies carried out within HIP have indicated that the Med 10 is a reliable document for statistical purposes, it was somewhat less than ideal for use as a criterion relating to the presence of diagnosed chronic conditions.

While the retrospective study conducted by HIP yielded valuable information, it was felt that its findings should be confirmed in a different population and that other aspects of interviewing problems could be investigated in a prospective record-check study. This plan for further research led to the arrangement with the Stanford Research Institute (SRI) to conduct such a study. Some of the comparative features of the two studies are discussed later.

Data Collection for the SRI Study

An important innovation in planning the prospective study undertaken by SRI was the creation of medical records to be used especially for the study—the Physician Visit Record (PVR)—which was filled out by the physician following each physician-patient visit. In preparing the PVR, summarized in the Physician Visits Record Summary (PVRS), the physicians were asked to enter any diagnosis (condition) impression or symptom that was considered, noted in the record, or mentioned by either the physician or the patient. The condition category noted in the record referred to conditions that the doctor had entered in the patient chart regularly filled out after each visit. It was quite possible that the patient had various conditions never mentioned in his meetings with the physician during the study year; such conditions would not have been entered on the PVR and



¹A form—the Physician Visit Record—was filled out by the physician for each sample person after each visit to SCPMG during the study year. At the end of the study year, the Physician Visit Records were summarized for each person; this summary is called the Physician Visits Record Summary. For more detailed information on this form, see Series 2, No. 23, page 7.

²"Health Interview Responses Compared With Medical Records," Series 2, No. 7.

thus would not have been summarized on the PVRS. The physician did not always enter on the PVR all conditions that he noted on the patient chart during a visit.

Some patients received part or all of their medical care outside SCPMG. Conditions reported by such patients would not necessarily appear in their medical records maintained at SCPMG. In estimating net differences it therefore seemed desirable to limit the study to data for persons who reported that they had used only SCPMG as a source of medical assistance during the study year. The study included only those conditions which were entered in the medical records or about which the respondent said he had spoken with a physician during the year. Because of these limitations the basic comparison in this report is between conditions found in the medical records (PVRS's) created for this study and conditions reported in the household interviews conducted after the completion of the study year.

The interviews, which were conducted by the U.S. Bureau of the Census acting as collecting agent for the Division of Health Interview Statistics, National Center for Health Statistics, pertained to conditions which were diagnosed or for which medical treatment had been received during the study year. The formats of the questionnaire used in the interviews, the Physician Visit Record, and the Physician Visits Record Summary are shown in appendix I of this report. A description of the sample design can be found in appendix III.

The questionnaire and corresponding PVRS for each patient were sent to the Division of Health Interview Statistics, which undertook demographic and medical coding of the study data. Transcription sheets were prepared, and chronic conditions on the questionnaire and PVRS were identified, compared, and matched.

Analysis of the Data

Once the chronic conditions had been identified, they were assigned the three- and four-digit diagnostic codes of the Seventh Revision of the International Classification of Diseases (ICD). The codes were summarized into a classification of 50 diagnostic categories similar to the Recode 3 used in the Health Interview Survey with each of

these 50 classes consisting of chronic conditions with specified codes. (See appendix II.)

If a chronic condition on the PVRS and a condition on the questionnaire had ICD codes within the same recode class, the conditions were assigned match code A.

If a chronic condition on the PVRS and a condition on the questionnaire had ICD codes that were not within the same recode class but appeared to be associated, the conditions were assigned match code B. (It is recognized that code B is not sharply defined.)

Chronic conditions on the PVRS which were not assigned either match code A or match code B were assigned *code C*. A code C condition on the PVRS had no associated condition on the questionnaire.

If a chronic condition on the questionnaire was not assigned either match code A or B, it was assigned code D, meaning that there was no associated condition on the PVRS. Code D conditions about which the respondent reported that he had seen or spoken to a physician in the preceding 12 months were analyzed separately as D12 conditions. Code D conditions for which the respondent did not report receiving medical services during the 12-month period are D+ conditions.

CHRONIC CONDITIONS BY TYPE OF MEDICAL SERVICES USED

As mentioned earlier, in order to consider the net effects of reporting errors, it was necessary to limit the study to persons who had utilized only SCPMG for medical services and only Kaiser Foundation hospitals for hospital services. Those interviewed were asked about the physicians they had contacted and hospitals they had used for their medical services during the study year and were then asked to authorize examination of their medical records.

Type of Medical Services

Table 1 shows the distribution of chronic conditions in the medical records and household interviews and of persons with chronic conditions according to the type of medical service utilized. The four classifications of these data are based on what physicians and hospitals the respondent



reported using during the study year: (1) SCPMG and Kaiser Foundation hospitals only, (2) other physicians and hospitals in addition to SCPMG and Kaiser Foundation hospitals, (3) only non-SCPMG physicians and hospitals, (4) no physician or hospital services at all. The tabulation excludes persons reported by both the medical records (PVRS's) and the questionnaire as having no chronic conditions.

Approximately 67 percent of all conditions recorded in the PVRS's and/or reported in the interviews were for persons who reported in the interview that they had received only SCPMG services and whose utilization status was verified in the PVRS. An additional 15 percent of the conditions were for persons who had received services from other medical facilities as well as from SCPMG, according to entries on the questionnaire and the PVRS. For approximately 9 percent of the conditions both PVRS and interview indicated that either no SCPMG services or no medical services whatever had been received.

It should be pointed out that the 245 persons (shown in table 1) who reported the receipt of services from "SCPMG only" according to the PVRS but reported "No utilization" in the household interview could have used the services of physicians and hospitals other than SCPMG. According to the medical records these respondents were seen by an SCPMG physician or were hospitalized in a Kaiser Foundation hospital for 596 conditions during the study year. These respondents may also have had conditions that were diagnosed by physicians or in hospitals outside SCPMG, but rather than have a separate category for "SCPMG and possible others" it was decided to categorize them as "SCPMG only."

An additional 172 conditions were recorded in the medical records (PVRS's) of persons who reported in the interview that they had used only non-SCPMG medical services. These may be viewed as reflecting a memory defect.

The classification of utilization for determining whether the person had utilized SCPMG was based on his PVRS, but the respondent's statements with respect to outside utilization or no utilization were accepted when they were not in conflict with the medical records (PVRS's).

There were 470 conditions reported by respondents who said they had used only SCPMG services for which no record of SCPMG usage

during the study year could be found on the PVRS's. Again, this seems to indicate a memory failure.

Distribution of Chronic Conditions

Of the 15,417 conditions found in either the medical records or in the household interview questionnaire, 14,099, or approximately 91 percent, were reported in the same manner in both sources with respect to the utilization of medical services. Approximately 88 percent (4,445 out of a total of 5,027) of the respondents reported the same utilization of medical services as was reported in the medical records.

For persons who either reported at least one chronic condition or had a chronic condition recorded on their PVRS, table 1 shows the number of chronic conditions per person according to the utilization of medical services as reported by the respondent and recorded on the PVRS. Persons who, according to both PVRS and questionnaire, utilized not only SCPMG but also other treatment facilities had about 20 percent more conditions per person than those who utilized SCPMG only, and persons in both of these categories had at least 50 percent more conditions per person than those who utilized only non-SCPMG sources and those who had no medical or hospital services.

The distribution of chronic conditions by type of match (A, B, C, D12, or D+) according to utilization as recorded on the PVRS and reported in the interview is shown in table 2.

More than one-third of the 15,417 conditions reported in the interview and/or recorded in the PVRS were conditions reported in the interview only for which the person did not report receiving medical services during the 12-month period preceding the interview (D+ conditions). Since the absence of medical treatment during the year precludes their being recorded in the PVRS's, these conditions are not considered in the rest of this report.

Of the 6,140 conditions recorded in the PVRS's (match categories A, B, and C, shown in the first line of table 2), 3,359, or approximately 55 percent, were also reported in the interview (match categories A and B). When conditions are restricted to those of persons who received SCPMG services only, the percentage is slightly less, 54 percent.

NET DIFFERENCES IN INTERVIEW REPORTS AND MEDICAL RECORDS

Underreporting and Overreporting of Chronic Conditions

An important consideration in this study is determining if there is an interchange between the conditions identified as C conditions (reported only in the records) and D12 conditions (reported only in the interviews), i.e., whether the words used by the patient and doctor in describing the same condition are sufficiently different from one another to preclude an A or B match.

Table 3 provides some information whether a person tends to have equal numbers of C (underreported) and D12 (overreported) conditions. The table shows, for persons who utilized only SCPMG services, the distribution of conditions by number of D12 conditions and number of C conditions. (In both cases, the maximums shown in the table are correct; i.e., no individual had more than five C conditions or eight D12 conditions.) Clearly the association between C and D12 conditions is not great. Of the 3,401 persons who utilized only SCPMG services, 998, or 29.3 percent, had neither a C nor a D12 condition. An additional 228 persons, 6.7 percent, had the same number of C and D12 conditions, and 1,476 persons, 43.4 percent, had numbers of C and D12 conditions that differed by one.

Among the sources of difference may be the reporting of an ailment as a single condition in one source and as more than one condition in the other source. Nonetheless, it is not reasonable to assume from the findings of this study that respondents were reporting C conditions as D12 conditions because of their failure to understand the nature of their conditions.

The basic measures of completeness of reporting in this study are presented in table 4 and summarized as indexes of reporting differences in table 5.

It is evident from table 4 that the number of conditions reported in the medical records (5,279) for persons who had received only SCPMG services during the 12 months prior to interview was roughly 12 percent higher than the number of conditions reported in the household interview (4,714). This difference is due entirely to condi-

tions on the PVRS only (C conditions) or reported in the household interview only (D12 conditions), and there are approximately 30 percent more C than D12 conditions. However, if one compares the percentages for all conditions reported in the PVRS's and all conditions reported in the household interviews, the agreement is fairly good, and the differences that do prist seem to be logical. For example, one of the larger differences is in the category "mental illness, specified types, not elsewhere classified." There is little difference in the less specific category "ill-defined mental and nervous trouble," and, in addition, when the questionnaires were examined the entries found in the medical records for such conditions had names such as "anxiety," or "tension," or other words that might not appear to a patient permanently living with such conditions to be the medical reasons for which he had consulted a doctor. On the whole, considering the tendency to underreport mental illness and other illnesses that the respondent believes to be socially unacceptable. lack of agreement between medical records and interview data in this instance is not unexpected.

Net Reporting Differences

In a study of this kind it is difficult to establish a proper denominator to compute a single index which will reflect the net reporting differences. As an alternative, two indexes are presented in table 5. One is the proportion of conditions found in the medical records but not reported in the interviews (an estimate of underreporting), and the other, the proportion of conditions reported in the interviews but not found in the records (an estimate of overreporting). Since these indexes, shown for each diagnostic category, are derived from the data shown in table 4, they are based on information about persons who used SCPMG services only for conditions that had been medically attended during the 1-year period covered by the PVRS's.

When both of the indexes for a particular diagnostic category are comparatively low, it can be expected, on the basis of this study, that conditions within the category will be reported in an interview with a fair degree of accuracy. If, in addition, the indexes are of the same general magnitude, the gross prevalence produced from



interview data will approximate the unbiased estimate of the true prevalence level in the population. If, on the other hand, either or both of the indexes for a category are high, then the estimates from the interview must be cor 'dered as suspect, even though two high indexes he same magnitude will produce an approximate gross prevalence.

Conditions with low indexes of underreporting and overreporting, which might be expected to be reported with a fair degree of accuracy and completeness in a household interview, include diabetes, vascular lesions of the central nervous system, heart conditions, diseases of the gall-bladder, and absence of fingers and toes.

In evaluating this material it should be kept in mind that overreporting may have resulted from the fact that record data were limited to those conditions for which a person had seen an SCPMG physician during the year. Thus, respondents could have reported in the interview conditions of long duration or even presently inactive conditions they had many years ago which were not noted in the current medical records. This possibility may explain some part of the overreporting in such categories as tuberculosis, rheumatic fever, sinusitis, bronchitis, and severe visual impairment.

Furthermore, data on the accuracy of chronic condition reporting in household interviews, shown in tables 4 and 5, should be interpreted in the light of some findings presented in the earlier report on this project (Series 2, No. 23). Some of the more pertinent paragraphs from the earlier publication that describe several of the shortcomings of the study follow.

Communication between physician and patient seemed to vary considerably from condition to condition. Often in the discussion, reference is made to the fact that something was or was not entered during the visits at which the physician reported the condition on the PVRS....

For 31.3 percent of the 6,140 conditions recorded on the PVRS, the physician stated that during no visit during the study year had he told the patient the actual diagnosis or a diagnosis codable to the actual diagnosis. Similarly, for about 51 percent of the conditions the physician stated that during no

visit had the patient told him either the actual diagnosis or used a term codable to the actual diagnosis—i.e., neither a formal diagnostic statement, lay terms, nor symptom statements related to the diagnosis had been used by the patient during his visits to the physician.

Sometimes in speaking to a patient a physician emphasizes the condition from which the patient is suffering and sometimes he does not. For 54 percent of the conditions, the physician claimed that during no visit had he made a particular point of the diagnosis in discussing the condition with the patient.

The physician was asked to enter on the PVR whether the patient reported having pain or emotional stress or spending at least I day in bed during the week preceding the patient's visit. Approximately 70 percent of the conditions were such that at no visit did the physician indicate on the PVR that the patient had had pain or emotional stress during the preceding week. For about 10 percent of the conditions, the physician stated that the patient had said he had spent at least I day in bed during the preceding week.

Even though the percentages quoted above pertain to all conditions in SCPMG records (A, B, and C conditions in table 2), it is reasonable to assume that they also apply to conditions among persons receiving SCPMG services only.

Completeness of Reporting by Frequency of Physician Visits

Shown in tables 6 and 7 are distributions of conditions by number of physician visits they caused during the study year based on information from the PVRS's (table 6) and by number of physician contacts reported in interviews (table 7). The data used for physician contacts were those stated by the respondent on the questionnaire. For 366 conditions table 7 shows no physician contact, but data from the PVRS's show that at least one SCPMG physician had been consulted. If these 366 conditions are included with the 1,592 conditions for which one contact was reported (table 7), the comparison of the percentages in the two tables,

while certainly not perfect, is sufficiently close to provide information for evaluative purposes. This is true with respect to all conditions and also with respect to the specific comparison of C and D12 conditions. There is some tendency for the number of physician contacts reported for conditions in the interview to be higher than the actual number of visits recorded in the PVRS because some of the physician contacts may have been by telephone rather than by personal visit.

A high proportion of the conditions that were underreported (C conditions in table 6) and over-reported (D12 conditions in table 7) consisted of those for which a single physician visit or contact was made during the study year. As the number of visits increased, the percent of conditions underreported or overreported declined sharply. This pattern indicates that increased opportunity for communication with the physician improves the ability of a respondent to report his conditions in an interview with accuracy and completeness.

Completeness of Reporting by Presence or Absence of Medication

In tables 8 and 9 the distribution of conditions included in the medical records and those reported in the household interviews is shown by type of match according to whether or not the person was taking medicine for the condition. Approximately 56 percent of the conditions for which the medical records indicated that no medication had been prescribed were not reported in household interviews (C match conditions in table 8). Only 33 percent of those conditions for which medication had been prescribed were not named during the interviews. The impact of frequent medical attention and regular medication, shown in tables 6 and 8, is effective in reducing the amount of underreporting in the household interview.

Overreporting of conditions was not unduly influenced by whether or not the respondent was taking medication. About 38 percent of those conditions reported in interviews as requiring medication were not found in the medical records. The comparable proportion for those conditions with

no medication during the study year was 45 percent (table 9).

Completeness of Reporting by Sex and Age

The distribution by sex of conditions recorded in PVRS's and reported in household interviews according to match code indicates that the proportion of conditions in all categories was much higher among women than among men (table 10). However, there was very little difference between the sexes in the underreporting of conditions; about 46 percent of the conditions for men shown in the medical records were not reported in the interview, while a very comparable percentage among women was 47 percent. However, the amount of overreporting was somewhat less among males than among females. No evidence of approximately 37, percent of the conditions reported in the interview by males was found in the records; among females the comparable percentage was 45 percent. Slightly more than two-thirds of all of the conditions recorded in the medical records for both sexes were among persons 35-64 years of age. About three-fourths of the recorded conditions not reported in the interview were among persons in this age range (table 11). When conditions in this age group are considered by type of match, the proportion of those in the records that were not reported in the interview was about the same among men and women. However, comparable percentages shown in table 12 indicate that the proportion of conditions overreported in this age range was substantially higher for women than for men.

The seemingly high percentage of conditions underreported by women 17-24 years of age, shown in table 11, can be attributed to the small numbers of total conditions among persons in this age group. The instability of the numbers in this age group may also account for the high rates of overreporting (table 12).

For persons 65 years and older, the accuracy and completeness of reporting was substantially greater among women than among men. The percentages summarized from tables 11 and 12



and shown in table A indicate that the A and B match rates were much higher for women and that they underreported and overreported conditions less frequently.

Table A. Proportion of chronic conditions reported among persons 65 years and over, by sex

Sex	Proportion of A and B matches based on medical records	Proportion of conditions in records that were not reported in interview	Proportion of conditions reported in interview that were not in the records
Male	56.8	43.2	38.2
Female	71.1	28.9	34.6

Completeness of Reporting by Educational Status

Of all the conditions recorded in the medical records or reported in the interview, essentially one-half of them were among persons with 9-12 years of education. The distribution of all conditions by education was quite similar to that for recorded conditions that were not reported in interviews (table 13) and for reported conditions for which there was no confirming evidence in the records (table 14). This would indicate that education did not influence the amount of underreporting and overreporting in this study to any appreciable degree with regard to total prevalence of chronic conditions. Most of the disparity in reporting noted among educational groups when they are considered by type of match can be attributed to the small numbers of conditions in some of the groups.

Comparability With HIP Study Findings

It is not possible to compare the net differences in interview data and medical record information derived from the HIP study and those of this study because the procedure used in the HIP study did not provide for the measurement of

overreporting. Any comparative estimates of the amount of underreporting in the two studies are very rough approximations because it is not possible from available data to restrict the HIP study group to those who had received only services under that insurance plan. However, gross figures indicate that approximately 56 percent of the conditions defined as unqualifiedly chronic in the HIP records were not reported in interviews, while a comparable estimate in the SRI study was 47 percent.

Among disease categories for which data are available, comparatively low rates of underreporting were found in both studies for asthma, hay fever, diabetes, heart conditions, bronchitis, ulcer of the stomach and duodenum, and diseases of the gallbladder. Those conditions which were grossly underreported in both studies include benign and unspecified neoplasms, anemia and other blood disorders, mental illness, respiratory diseases other than bronchitis and tuberculosis. skin diseases, and menopausal and other genitourinary disorders. Findings from both studies indicate that underreporting occurred less frequently among older persons than among children and young adults, and also among those with 10 or more physician visits during the study year than for those who had seen a physician less frequently.

SUMMARY

A study designed to measure the accuracy and completeness of the reporting of chronic conditions in health interviews was carried out by the Stanford Research Institute during the early years of the National Health Survey. The sample population was selected from members of the Kaiser Foundation Health Plan, a large prepayment medical plan providing medical services through the Southern California Permanente Medical Group and hospitalization through the Kaiser Plan. Medical records were compared with interview responses from persons for whom the records were maintained. The study design provided for the creation of medical records specifically for this study in order that the project could be conducted on a prospective basis. Interviews were conducted following the completion of physician records maintained on sample persons during a 12-month period.



This report has presented the findings in the phase of the study dealing with the comparative amounts of underreporting and overreporting of chronic conditions in health interviews. The following statements summarize the principal findings of the study.

The total number of chronic conditions recorded in the medical records and/or reported in interviews amounted to 15,417. For this phase of the study the following categories of conditions were excluded: 4,499 conditions that had not been treated exclusively in SCPMG facilities, 3,633 conditions that were reported in interviews as having been treated in SCPMG facilities prior to the 12-month period covered by the study, and 103 conditions for which SCMPG utilization status was not available. These exclusions reduced the group to 7,182 chronic conditions, Of this number, 2,811 conditions were recorded in the medical records and also reported in the interviews, 2,468 conditions were recorded in the records but not reported in interviews, and 1,903 conditions were reported in interviews but not recorded in the medical records.

Reporting indexes derived from these figures (shown in table 5) indicate that the estimate of underreporting in interviews was 46.8 percent and the estimate of overreporting of conditions was 40.4 percent.

When conditions were classified into 50 broad disease categories, it was found that certain kinds of conditions with comparatively low indexes of both underreporting and overreporting might be expected to be reported in an interview with a fair degree of accuracy and completeness. Included were diabetes, vascular lesions of the central nervous system, heart conditions, diseases of the gallbladder, and absence of fingers and toes.

High indexes of underreporting with rather low proportions of overreporting were noted for such conditions as benign and unspecified neoplasms, mental illness of specified type, menstrual disorders, and skin diseases. These results were not unexpected in the reporting of conditions which might cause embarrassment or reluctance on the part of the respondent.

High indexes of overreporting with a lower degree of underreporting were found in the reporting of hay fever, asthma, tuberculosis, headache and migraine, hypertension, hemorrhoids, rheumatic fever, sinusitis, bronchitis, visual impairments, hearing impariments, and speech defects. It is quite possible that respondents were reporting conditions of long duration or even conditions they had many years ago which were not noted in current medical records.

A high proportion of the conditions that were underreported or overreported consisted of those for which a single physician visit or contact was made during the study year. The sharp increase in the accuracy of reporting as the number of physician visits increased indicates that opportunity for communication with his physician improves the ability of a respondent to report his conditions in an interview. Regular medication for a condition also increases the probability that it will be reported in an interview.

The percentage of underreporting of conditions was about the same for men and women; however, women have a greater tendency to overreport their conditions. For persons 65 years and older, the accuracy and completeness of reporting were substantially higher among women than among men. Education did not influence the amount of underreporting and overreporting in this study to any appreciable degree.



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Table 1. Number and percent distribution of chronic conditions and persons with chronic conditions and number of chronic conditions per person for persons having at least one condition by utilization of medical services as reported in medical records and interviews

Utilization a Medical records	Interview	All con- ditions	All persons ¹	Chronic condi- tions per person	All con- ditions	All persons ¹
		Number			Pérc distrib	
SCPMG only	SCPMG only	10,322	3,156	3.27	67.0	62.8
SCPMG and others	SCPMG and others	2,350	594	3.96	15.2	11.8
Non-SCPMG only	Non-SCPMG only	825	361	2.29	5.4	7.2
No utilization	No utilization	602	334	1.80	3.9	6.6
SCPMG only	.No utilization	596	245	2.43	3.9	4.9
SCPMG and others	Non-SCPMG only	172	67	2.57	1.1	1.3
Non-SCPMG only	SCPMG and others	80	50	1.60	0.5	1.0
No utilization	SCPMG only	470	220	2.14	3.0	4.4
Total	15,417	5,027	•••	100.0	100.0	

 $^{^{1}\}mathrm{Excludes}$ persons with no reported conditions either on the PVRS or on the question-naire.



Table 2. Number and percent distribution of chronic conditions by utilization of medical services as reported in medical records and interviews, according to type of match

Utilization a			Тур	e of mat	ch		
		All condi-	A	В	С	Report intervi	
Medical records	Interview		A	В	C	D12 ¹	D+
·		Number of conditions					
SCPMG only	SCPMG only	10,322	1,902	855	2,323	1,996	3,246
SCPMG and others	SCPMG and others	2,350	344	161	· 285	819	741
Non-SCPMG only	Non-SCPMG only	825			• • •	463	362
No utilization	No utilization	602	••••	• • •	•••	20	582
SCPMG only	No utilization	596	28	26	145	10	387
SCPMG and others	Non-SCPMG only	172	32	11	28	48	53
Non-SCPMG only	SCPMG and others	80	•••	•••	• • • •	10	. 70
No utilization	SCPMG only	470	•••.	• • •	•••	250	220
Total		15,417	2,306	1,053	2,781	3,616	5,661
		P	ercent di	stributi	on of co	nditions	
SCPMG only	SCPMG only	67.0	82.5	81.2	5. ذع	55.2	57.3
SCPMG and others	SCPMG and others	15.2	14.9	15.3	10.2	22.6	13.1
Non-SCPMG only	Non-SCPMG only	5.4		• • •	• • •	12.8	6.4
No utilization	No utilization	3.9	• • • •	• • •	•••	0.6	10.3
SCPMG only	No utilizati o n	3.9	1.2	2.5	5.2	0.3	6.8
SCPMG and others	Non-SCPMG only	1.1	1.4	1.0	1.0	1.3	0.9
Non-SCPMG only	SCPMG and others	0.5		• • •	• • •	0.3	1.2
No utilization	SCPMG only	3.0	• • •	• • •	•••	6.9	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	

¹Excludes conditions for which information on medical attention received during the past 12 months was not available.

NOTE: Definition of type of match:

A = conditions reported on PVRS and in interview which matched.
B = conditions reported on PVRS and in interview which appeared to be associated.
C = conditions recorded in PVRS only.

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.

D+ = conditions reported in interview only about which respondent said he had not contacted a physician during the preceding 12 months.

Table 3. Number and percent of persons using SCPMG services only by number of under-reported (match code C) and overreported (match code D12) chronic conditions

	.						
Number of D12 conditions ¹	Total	N	umber o	mber of conditions recorded on PVRS only (C match)			
,		0	1	2	3	4	5
			Number	of per	sons		
All conditions	3,401	1,750	1,057	428	117	41	8
0	2,123	998	755	263	68	35	4
1	873	511	194	124	34	6	4
2	256	145	68	32	11		
3	96	61	26	7	2	-	-
4	. 36	23	13	-	-	-	-
5	10	7	1	2		-	-
6	1	1	-	-	-	-	-
7	5	4	-	-	1	-	-
8	1	-	-	-	1	_	-
			Percen	t of pe	ersons		•
All conditions	100.0	51.5	31.1	12.6	3.4	1.2	0.2
0	62.4	29.3	22.2	7.7	2.0	1.0	0.1
1	25.7	15.0	5.7	3.6	1.0	0.2	0.1
2	7.5	4.3	2.0	0.9	0.3	-	-
3	2.8	1.8	0.8	0.2	0.1	-	-
4	1.1	0.7	0.4	_	-	-	••
5	0.3	0.2	0.0	0.1	-	_	
6	0.0	0.0	-	-	-	-	-
7	0.1	0.1	-	-	0.0	_	-
8	0.0	-	-	-	0.0	-	-

 $^{^{}m 1}$ Excludes conditions for which information on medical attention received during the past 12 months was not available.

C = conditions recorded in PVRS only.



NOTE: Definition of type of match:
A = conditions reported on PVRS and in interview which matched.
B = conditions reported on PVRS and in interview which appeared to be associated.

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.

Table 4. Number of chronic conditions for persons using SCPMG services only, by type of match

=						
		· ·				
	Chronic condition and recode number	Reported in medical records (A+B+C)	Reported in inter- views ² (A+B+D12)	Reported in both medical records and in- terviews (A+B)	Reported in medical records only (C)	Reported in in- terviews only ² (D12)
			Number	of condit	ions	-
	All chronic conditions	5,279	4,714	2,811	2,468	1,903
01	Tuberculosis (active) (inactive), all					
	sites	1	6	1	-	5
02	Other chronic infective and parasitic diseases	86	62	38	48	24
03	Malignant neoplasms	49	57	30	19	27
04	Benign and unspecified neoplasms	299	164	130	169	34
05	Hay fever, without asthma	164	228	120	44	108
06	Asthma (with or without hay fever)	1		[[1 200
07	(bronchial) (not otherwise specified) Other allergic disorders, not elsewhere	39	55	27	12	28
•,	classifiable	117	114	64	53	50
08	Diseases of the thyroid gland	61	65	39	22	26
09	Diabetes (mellitus)	88	72	71	17	1
10	Anemia and other diseases of the blood					_
	and blood-forming organs, 3 mo.+	40	45	15	25	30
11	Vascular lesions of the central nervous	1	1			
	system	28	30	24	4	6
12	Headache and migraine, chronic	90	119	56	34	63
13	Specified mental disorders, not elsewhere	381	100	152	220	28
14	classifiable	301	180	152	229	20
14	Ill-defined mental and nervous trouble, not elsewhere classifiable, 3 mo.+	89	86	38	51	48
15		"		30	31	40
	classifiable (chronic rheumatic) (arte-	Į.				1
	riosclerotic) (hypertensive)	238	245	189	49	56
16			j		,	
	without heart involvement	227	285	184	43	101
17	Varicose veins	81	82	39	42	43
18 19	Hemorrhoids	131	192	87	44	105
73	Rheumatic fever; arteriosclerosis, not					1
	elsewhere classifiable; other chronic diseases of the circulatory system	33	48	13	20	35
20	Chronic sinusitis	19	91	19		72
21	Chronic bronchitis	24	61	19	5	42
22	Other chronic diseases of the respiratory				j ,	
	system	151	128	66	85	62
23	Ulcer of stomach and duodenum	111	112	67	44	45
24	Hernia (abdominal cavity)	78	67	40	38	27
25	Diseases of the gallbladder, chronic	27	34	23	4	11
26	Other chronic diseases of the digestive system	267	198	130	137	68
		. 207	120	130	13/	

See notes at end of table.



Table 4. Number of chronic conditions for persons using SCPMG services only, by type of match-Con.

			Тур	e of match		
	Chronic conditions and recode number 1	Reported in medical records (A+B+C)	Reported in inter- views ² (A+B+D12)	Reported in both medical records and in- terviews (A+B)	Reported in medical records only (C)	Reported in in- terviews only ² (D12)
			Number	of condit	ions	·
27	Disorders of menstruation	170	102	86	84	16
28	Menopausal symptoms, except psychosis	98	47	21	77	26
29	Urinary calculi; prostate disorders; other					
	chronic genitourinary conditions	384	211	131	253	80
30	Chronic skin diseases	429	195	148	281	47
31	Arthritis and chronic rheumatism	178	238	122	56	116
32	Other chronic musculoskeletal disorders	175	107	75	100	32
33	Fractures, 3 mo.+, no residual specified	6	16	1 4	ž	1 12
34	Other injuries, 3 mo.+, no residual				_	
	specified	9	15	2	7	13
35	Severe visual impairment	2	-8	l - 2		6
36	Other visual impairment	80	95	57	23	38
37	Hearing impairments	50	103	36	14	67
38	Speech defects	4	7	34	1	3
39	Paralysis	32	36	20	12	16
40	Absence, fingers, toes, only	34	34		1	10
41	Absence, major extremities		_		_	_
42	Impairments (except paralysis and ab-			_	-	_
-	sence), back or spine	124	138	75	49	63
43	Impairments (except paralysis and ab-	124	130	, ,	4,	. 03
-147	sence), upper extremities and shoulders	15	19	7	8	12
44	Impairments (except paralysis and ab-	1.5	1	,	0	1 12
	sence), lower extremities and hips with					
	any other site	64	100	30	34	7.0
45	Impairments (except paralysis and ab-	04	108	30	34	78
7.7	sence), multiple not elsewhere classifi-	'				
		/, 9	22	26	1.7	.,
46	able, and ill-defined, limbs, back,trunk-	43	33	26	17	/
40 47	Other impairments	5	13	4	1	. 9
47	Other chronic conditions, not impairments		۰, ا	٠.	,_	
48	and not in recodes 48-50	83	54	36	47	18
	Chronic diseases of eye, not impairments	224	192	118	106	74
49	Chronic diseases of ear, not impairments	98	. 73	61	37	12
50	Chronic organic nervous system conditions-	83	74	. 61	22	13

¹The recode categories 1-46 are the same as those used in the Recode 3 for the Health Interview Survey. Recodes 48-50 were included in Recode 47 in the original recode.

2Excludes conditions for which information on medical attention received during the past 12 months was not available.



NOTE: Definition of type of match:

A = conditions reported on PVRS and in interview which matched.

B = conditions reported on PVRS and in interview which appeared to be associated.

C = conditions recorded in PVRS only.

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months. -cian during the preceding 12 months.

Table 5. Percent of chronic conditions underreported and overreported in interviews for persons using SCPMG services only, by type of match

		accii	
		Type of	match
	Chronic condition and recode number 1	Reported in medical records only $\left(\frac{C}{A+B+C}\right)$	Reported in interviews only? (D12 A+B+D12)
		Percent under- reported	Percent over- reported
	All chronic conditions	46.8	40.4
01 02 03 04 05 06	Tuberculosis (active) (inactive), all sites	55.8 38.8 56.5 26.8 30.8 45.3 36.1	83.3 38.7 47.4 20.7 47.4 50.9 43.9 40.0
09 10	Diabetes (mellitus)	19.3	1.4
11 12 13	Vascular lesions of the central nervous system	14.3 37.8 60.1	20.0 52.9 15.6
14 15	Ill-defined mental and nervous trouble, not elsewhere classi- fiable, 3 mo.+	57.3	55.8
16	rheumatic) (arteriosclerotic) (hypertensive)	20.6	22.9
17 18 19	involvement	18.9 51.9 33.6	35.4 52.4 54.7
20	able; other chronic diseases of the circulatory system Chronic sinusitis	60.6	72.9 79.1
21 22 23 24 25	Chronic bronchitis Other chronic diseases of the respiratory system Ulcer of stomach and duodenum Hernia (abdominal cavity)	20.8 56.3 39.6 48.7 14.8	68.9 48.4 40.2 40.3 32.4
26 27 28	Other chronic diseases of the digestive system Disorders of menstruation	51.3 49.4 78.6	34.3 15.7 55.3

See notes at end of table.

Table 5. Percent of chronic conditions underreported and overreported in interviews for persons using SCPMG services only, by type of match-Con.

	·	Type of	match
	Chronic condition and recode number ¹	Reported in medical records only $\left(\frac{C}{A+B+C}\right)$	Reported in interviews only 2 (D12 (A+B+D12)
		Percent under- reported	Percent over- reported
30 Ch 31 A3 32 Of 32 Of 33 Fr 33 Si 34 Of 33 Fr 33 Si 39 Pr 40 A1 A1 A2 Ir 44	rinary calculi; prostate disorders; other chronic genito- urinary conditions	65.9 65.5 31.5 57.1 33.3 77.8 28.8 28.0 37.5 39.5 53.3 53.1 39.5 20.0 56.6 47.3 37.8	37.9 24.1 48.7 29.9 75.0 86.7 75.0 40.0 65.0 42.9 44.4 45.7 63.2 72.2 21.2 69.2 33.3 38.5 16.4

 $^{^1\}mathrm{The}$ recode categories 1-46 are the same as those used in the Recode 3 for the Health Interview Survey. Recodes 48-50 were included in Recode 47 in the original recode.

Excludes conditions for which information on medical attention received during the past 12 months was not available.

NOTE: Definition of type of match:

A = conditions reported on PVRS and in interview which matched.
B = conditions reported on PVRS and in interview which appeared to be associated.
C = conditions recorded in PVRS only.

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.



Table 6. Number and percent distribution of chronic conditions recorded in medical records for persons using SCPMG services only by number of physician visits for the conditions, according to type of match

	All	Type of match			
Number of physician visits	conditions	A	В	С	
		Number of co	onditions		
All visits	5,279	1,930	881	2,468	
1	2,616 1,133 554 331 226 342 54 18	630 438 249 177 139 230 48 14	448 158 109 76 28 56 4 2	1,538 537 196 78 59 56 2 2	
	Percent	distributio	on of cond	litions	
All visits	100.0	100.0	100.0	100.0	
1	49.6 21.5 10.5 6.3 4.3 6.5 1.0 0.3	32.6 22.7 12.9 9.2 7.2 11.9 2.5 0.7	50.9 17.9 12.4 8.6 3.2 6.4 0.5	62.3 21.8 7.9 3.2 2.4 4 2.3 0.1	

NOTE: Definition of type of match:

A = conditions reported on PVRS and in interview which matched.
B = conditions reported on PVRS and in interview which appeared to be associated.
C = conditions recorded in PVRS only.
D12 = conditions reported in interview only about which respondent said he had contacted a physical distriction of the conditions reported in interview only about which respondent said he had contacted a physical distriction of the conditions. cian during the preceding 12 months.

Table 7. Number and percent distribution of chronic conditions reported in interviews for persons using SCPMG services only by number of physician contacts for the conditions, according to type of match

		,		
was after status as a sail	A11	т	ype of matc	h
Number of physician contacts	conditions	A	В	D12 ²
	Nu	mber of cond	itions	
All contacts	4,535	1,831	801	1,903
0 ³	366 1,592 718 440 420 147 457 249 82 64	220 376 284 215 185 75 264 127 52 33	146 219 106 78 67 15 87 53 15	997 328 147 168 57 106 69 15
All contacts	Percent	istributio	n of condit	100.0
0 ³	8.1 35.1 15.8 9.7 9.3 3.2 10.1 5.5 1.8	12.0 20.5 15.5 11.7 10.1 4.1 14.4 6.9 2.8 1.8	18.2 27.3 13.2 9.7 8.4 1.9 10.9 6.6 1.9	52.4 17.2 7.7 8.8 3.0 5.6 3.6 0.8

 $^{^{1}}$ A physician contact occurred if a physician was seen or spoken to about the condition. Conditions for which the respondent did not know (or could not estimate) the number of physician con-²Excludes conditions for which information on medical attention received during the past 12

months was not available.

NOTE: Definition of type of match:

A = conditions reported on PVRS and in interview which matched.

B = conditions reported on PVRS and in interview which appeared to be associated.

C = conditions recorded in PVRS only.

D12 = Conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.



³Includes conditions for which the respondent reported no physician contacts in the interview but for which it was known from entries on the PVRS that there had been at least one contact during the study year.

Table 8. Number and percent distribution of chronic conditions reported in medical records for persons using SCPMG services only by type of match, according to whether or not medication was prescribed

Medication status in medical records	A11	Type of match						
	conditions	A	В	С				
		Number of co	or.ditions					
Total	5,279	1,930	881	2,468				
MedicationNo medication	2,121 3,158	979 951	437 444	705 1,763				
	Percent distribution of conditions							
Total	100.0	36.6	16.7	46.8				
MedicationNo medication	100.0 100.0	46.2 30.1	20.6 14.1	33.2 55.8				

NOTE: Definition of type of match:

Table 9. Number and percent distribution of chronic conditions reported in interviews for persons using SCPMG services only by type of match, according to whether or not medication was prescribed

	A11	Type of match					
Medication status reported in interview	conditions	A	В	D12 ¹			
	,	Number of co	nditions ²				
Tota1	4,780	1,909	865	2,006			
MedicationNo medication	2,254 2,526	966 943	426 439	862 1,144			
	Percent	distributio	n of condit	ions			
Total	100.0	39.9	18.1	42.0			
MedicationNo medication	100.0	42.9 37.3	18.9 17.4	38.2 45.3			

 $^{^{1}\}mathrm{Excludes}$ conditions for which information on medical attention received during the past 12

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.



A = conditions reported on PVRS and in interview which matched.

B = conditions reported on PVRS and in interview which appeared to be associated. C = conditions recorded in PVRS only.

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.

months was not available.

Excludes conditions for which the medication status could not be obtained from the interview data.

NOTE: Definition of type of match: A = conditions reported on PVRS and in interview which matched. B = conditions reported on PVRS and in interview which appeared to be associated.

C = conditions recorded in PVRS only.

Table 10. Number and percent distribution of chronic conditions reported in medical records and in interviews for persons using SCPMG services only by sex and type of match

	Conditions in medical records Conditions in interviews								
Sex	All condi-	Тур	e of ma	itch	All condi-	Туре	of mat	ch	
	tions	A	В	С	tions	A	В	D12 ¹	
			Numb	er of c	onditions				
Both sexes	5,279	1,930	881	2,468	4,817	1,930	881	2,006	
Male	2,168	813	363	992	1,873	813	363	697	
Female	3,111	1,117	518	1,476	2,944	1,117	518	1,309	
		Percent	distrib	ution o	f conditi	ons by	sex		
Both sexes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Male	41.1	42.1	41.2	40.2	38.9	42.1	41.2	34.7	
Female	58.9	57.9	58.8	59.8	61.1	57.9	58.8	65.3	
	Percent distribution of conditions by type of match							h	
Both sexes	100.0	36.6	16.7	46.8	100.0	40.1	18.3	41.6	
Male	100.0	37.5	16.7	45.8	100.0	43.4	19.4	37.2	
Female	100.0	35.9	16.7	47.4	100.0	37.9	17.6	44.5	

 $^{^1\}mathrm{Excludes}$ conditions for which information on medical attention received during the past 12 months was not available.



NOTE: Definition of type of match:

A = conditions reported on PVRS and in interview which matched.

B = conditions reported on PVRS and in interview which appeared to be associated.

C = conditions reported in PVRS only.

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.

Table 11. Number and percent distribution of chronic conditions reported in medical records for persons using SCPMG services only by age and type of match, according to sex

		Mal	e		Female					
Age	All condi-	Тур	e of ma	tch	All condi-	Тур	e of ma	tch		
	tions	A	В	С	tions	A	В	С		
			Num	ber of	conditio	ns				
17 years and over	2,168	813	363	992	3,111	1,117	518	1,476		
17-24 years	88 166 415 622 426 451	40 51 136 260 138 188	9 43 75 107 61 68	39 72 204 255 227 195	167 398 820 765 608 353	58 155 277 260 193 174	18 50 131 117 125 77	91 193 412 388 290 102		
	Percent distribution of conditions by age									
17 years and over	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
17-24 years	4.1 7.7 19.1 28.7 19.6 20.8	4.9 6.3 16.7 32.0 17.0 23.1	2.5 11.8 20.7 29.5 16.8 18.7	3.9 7.3 20.6 25.7 22.9 19.7	5.4 12.8 26.4 24.6 19.5 11.3	5.2 13.9 24.8 23.3 17.3 15.6	3.5 9.7 25.3 22.6 24.1 14.9	6.2 13.1 27.9 26.3 19.6 6.9		
	Perce	ent dist	ributio	n of co	nditions	by type	of mat	ch		
17 years and over	100.0	37.5	16.7	45.8	100.0	35.9	16.7	47.4		
17-24 years	100.0 100.0 100.0 100.0 100.0 100.0	45.5 30.7 32.8 41.8 32.4 41.7	10.2 25.9 18.1 17.2 14.3 15.1	44.3 43.4 49.2 41.0 53.3 43.2	100.0 100.0 100.0 100.0 100.0	34.7 38.9 33.8 34.0 31.7 49.3	10.8 12.6 16.0 15.3 20.6 21.8	54.5 48.5 50.2 50.7 47.7 28.9		



NOTE: Definition of type of match:

A = conditions reported on PVRS and in interview which matched.

B = conditions reported on PVRS and in interview which appeared to be associated.

C = conditions recorded in PVRS only.

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.

Table 12. Number and percent distribution of chronic conditions reported in interviews for persons using SCPMG services only by age and type of match, according to sex

		Male			Female					
Age	All	Туре	of ma	tch	A11	Type of match				
	condi- tions	A	В	D12 ¹	condi- tions	A	В	D12 ^I		
			Numi	ber of	condition	S	'			
17 years and over	1,873	813	363	697	2,944	1,117	518	1,309		
17-24 years	116 177 302 573 291 414	40 51 136 260 138 188	9 43 75 107 61 68	92	388 781 692 516	58 155 277 260 193 174	18 50 131 117 125 77	107 183 373 315 198 133		
	Percent distribution of conditions by age									
17 years and over	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
17-24 years	6.2 9.5 16.1 30.6 15.5 22.1	4.9 6.3 16.7 32.0 17.0 23.1	2.5 11.8 20.7 20.5 16.8 18.7	11.9 13.1 29.6 13.2	13.2 26.5 23.5 17.5	23.3 17.3	3.5 9.7 25.3 22.6 24.1 14.9	8.2 14.0 28.5 24.1 15.1 10.2		
	Perce	nt distr	ibutio	n of co	nditions	by type	of matc	h		
17 years and over	100.0	43.4	19.4	37.2	100.0	37.9	17.6	44.5		
17-24 years	100.0 100.0 100.0 100.0 100.0	34.5 28.8 45.0 45.4 47.4 45.4	7.8 24.3 24.8 18.7 21.0 16.4	46.9 30.1 36.0 31.6	100.0 100.0 100.0 100.0	31.7 39.9 35.5 37.6 37.4 45.3	9.8 12.9 16.8 16.9 24.2 20.1	58.5 47.2 47.8 45.5 38.4 34.6		

 $^{^1\}mbox{Excludes}$ conditions for which information on medical attention received during the past 12 months was not available.



NOTE: Definition of type of match:

A = conditions reported on PVRS and in interview which matched.

B = conditions reported on PVRS and in interview which appeared to be associated.

C = conditions recorded in PVRS only.

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.

Table 13. Number and percent distribution of chronic conditions reported in medical records for persons using SCPMG services only by education of respondent and type of match

	A11	Ту	Type of match						
Education of respondent	condi- tions	A	В	С					
	1	Number of co	onditions						
All educational groups	5,254	1,921	880	2,453					
No education	72 84 922 2,684 708 468 316	25 26 353 995 273 166 83	24 15 166 443 108 63 61	23 43 403 1,246 327 239 172					
	Percent	distributi by educ		itions					
All educational groups	100.0	100.0	100.0	100.0					
No education	1.4 1.6 17.5 51.1 13.5 8.9 6.0	1.3 1.4 18.4 51.8 14.2 8.6 4.3	2.7 1.7 18.9 50.3 12.3 7.2 6.9	0.9 1.8 16.4 50.8 13.3 9.7 7.0					
	Percent	distributi by type o		itions					
All educational groups	100.0	36.6	16.7	46.7					
No education	100.0 100.0 100.0 100.0 100.0 100.0	34.7 31.0 38.3 37.1 38.6 35.5 26.3	33.3 17.9 18.0 16.5 15.3 13.5	31.9 51.2 43.7 46.4 46.2 51.1 54.4					

NOTE: Definition of type of match:



A = conditions reported on PVRS and in interview which matched.

B = conditions reported on PVRS and in interview which appeared to be associated.

C = conditions recorded in PVRS only.

D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.

Table 14. Number and percent distribution of chronic conditions reported in interviews for persons using SCPMG services only by education of respondent and type of match

Education of respondent	All	Type of match					
radication of respondent	condi- tions	A	В	D12 ¹			
		Number of c	onditions				
All educational groups	4,791	1,921	880	1,990			
No education	89 92 802 2,473 678 393 264	25 26 353 995 273 166 83	24 15 166 443 108 63 61	40 51 283 1,035 297 164 120			
	Percent	distributi by educa		itions			
All educational groups	100.0	100.0	100.0	100.0			
No education	1.9 1.9 16.7 51.6 14.2 8.2 5.5	1.3 1.4 18.4 51.8 14.2 8.6 4.3	2.7 1.7 18.9 50.3 12.3 7.2 6.9	2.0 2.6 14.2 52.0 14.9 8.2 6.0			
	Percent	distributi by type o		itions			
All educational groups	100.0	40.1	18.4	41.5			
No education	100.0 100.0 100.0 100.0 100.0 100.0	28.1 28.3 44.0 40.2 40.3 42.2 31.4	27.0 16.3 20.7 17.9 15.9 16.0 23.1	44.9 55.4 35.3 41.9 43.8 41.7 45.5			

 $^{^{1}\}mathrm{Excludes}$ conditions for which information on medical attention received during the past 12 months was not available.



NOTE: Definition of type of match:

A = conditions reported on PVRS and in interview which matched. B = conditions reported on PVRS and in interview which appeared to be associated. C = conditions recorded in PVRS only. D12 = conditions reported in interview only about which respondent said he had contacted a physician during the preceding 12 months.

APPENDIX 1. FORMS

Version One of Questionnaire

D.S. DEPARTMENT OF CONSIGNATE BUREAU OF THE CENTURE ACTIME AS COLLECTIVE AREATY FOR THE A. FURLIN HARLATY SERVICE NATIONAL HEALTH SURVEY	survey and							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
NATIONAL HEALTH SURVEY Questionnaires 3. Address or description of location 3. Assignment No. 4. Serial No. 6. What is the telephone number hear? 7. Telephone No. 8. Telephone No. 9. Telephone No. 9. Telephone No. 1. Telephone No. 9. Telephone No. 1. Telephone No. 1. Telephone No. 1. Telephone No. 1. Telephone No. 8. Telephone No. 1. Telephone No	овы 1843-5-1 9-4-62)	134	AC	TING A	UREAU OF THE	E CERS	Je FOR THE					nalire —		
A Address of description of location 3. Assignment No. 3. Assignment No. 5. Milith of these income proper represents your total family income for the past 12 marks, that is, your's, your 's, ore 'stall No. 6. Milith of these income proper represents your total family income from the past 12 marks, that is, your's, your 's, ore 'stall No. 6. What is the relightone number hare? 7. If sumple person has not been interviewed but interview has been completed for other related members, ask: As I sentimed outlier, in each household we ask came special questions elseve use person for binacel' or other related members, ask: As I sentimed outlier, in each household we ask came special questions elseve use person for binacel' or other related members, ask: As I sentime destricts in each household we ask came special questions elseve use person for binacel' or other rises of call) 6. RECORD Read time to call) 6. Record of Col.No. Callisach SP Sample Person 7. Time 7. Type 8 7. Type 8 7. Type 2 7. Type 3 7. As Type 8 7. Type 2 7. Sample person Sampl			1								·			
b. Mailing address if not abown in (a): Include city and State Description Descri		e. Addres												
Which of these income groups represents your total feasily income for the past 12 months, there is, your's, your's, your's, the property, each set was a wages, selecter, cents from property, pensions, What is the telephone number here? Telephone No. If sample person has not been later lewed but interview has been completed for other triated members, ask: As I mentioned serifor, in each household we sak some special questions above one person for falses! andy. In this case, it is would be able to see him (or her!? (Exist best time to call) (Exist best time to call) RECORD RECORD Item 1 Com. 2 Com. 3 Com. 4 Com. 5 COM. OF CALLS AT HOUSE. HOLDS Result Result Result For time 1 Time TYPE B TYPE Z Sample Person Time Inscription on other leaded for Sample family mered for mered for mered for sample Person Inscription of calls	. ADDRESS													
Telephone No. Nose		b. Mailing	address :	if not a	bowa ia (e): [s	selude (city and State				4. Serial No	•		
Nose	Which of a ste? (Shown help from	hese income v Card H). I rolatives, et	proups re include in	sproson Como fr	ts your total fa om all sources	mily in	esan for the pressure sale	rice, ro	norths, that is, ats from propo	your's ty, pos	, year18, islens,	Grow		
As I mentioned earlier, in each household we ask some openied questions above one person for himself only. In this case, it is	. What is th	e telephone	number h	ret		Telep	acee No.					None		
RECORD OF CALLS AT HOUSE. Household Time Date household Time Time Time Time Time Time Time Time	As I menti only. In t	ioned earlies his cass, it	, in each le	heusek			ial quostions a	bovt on	e porson for hi	meelf				
OF CALLS AT HOUSE. HOUSE. HOLDS Record of Cellisechs for Sample Person Time Type A Type B Type Z		•					(B.	rier bei	el time te call)		Dete		Time	
AT HOUSE-HOLDS Rescrid of Col.No. Callbacks for Sample Person Time Time TYPE A TYPE B TYPE Z TYPE Z TYPE B TYPE Z Type Z Type Z Toda Other (Specify) Other (Specify) Time Type Z Type			Item	T	1	Com.	2	Com.	,	Com.	4	Com.	5	a
Rescal of Callbeds for Semple Person Time Type A Type B Type Z Type Z Type Z Type A Type B Type Z Iscrylew not obtained for Sample Person (SP): (Specify reason) Type Z T	CALLS AT HOUSE-													
POR NON- INTER- VIEW No one at home - repeated cells Generally mered fe 1 ste.) Sample Person (SP): Other (Specify) (Specify reason) (Specify reason)	,	Cellbecks for Semple	1							_				
NON- INTER- VIEW Refuse No one at home - repeated cells Temporarily absent Other (Specify)	REASON		TYP	EA			1	TYPE B				TY	e z	
	NON- INTER-	No o	os at hom porarily ai	bsent	rated cells		(Specify, e.g., moved to	Sample:	o family nte.)		Sample l	ersue	_	
POOTHOTES	D. Signature	of interview	wet								11. Code			
POOTNOTES										1				
	COTHOTES								-	_				





I. a. What is the i	nome of the head of this household? (Enter name in appropriate	Last	nsme			(4S)	Last name		0
b. What are the live here) c. Is there any temporarily	names of all other persons who live here? (List all persons who one else who lives here who is now in a hospital?	Fitst	name s	nd initi	al .		First name	and initial	
e, On a visit?.	one else staying here naw? Na Yes (Liet)								
2. How ore you to	loted to the head of the household? (Linter relationship to ple: head, wife, daughter, grandson, mother-in-law, etc.)	Rela	tionship	>			Relationshi	p	
3. How old were y	rau on yaur last birthday?	Age			Under 1	year	Age	Unde	r I year
4. Race (Check o	ne box for each person)	_ •	Vhite (Nego	· 🗆	ther	□ Vhite	Negro 🗆	Other
5. Sex (Check and	box for eacl; person)		Kale Female				☐ Male ☐ Female		
	ar over, s.sk: arried, widawed, divorced, separared, ar never married? k far each person)	□ '	Married Widowed Divorced	י ב	yeara Separ Never Marrie		Married Widowe Divorce	a ⊟iy	ars eparated lever larried
If 17 years old 7. o. What is the (Circle high	or over, ask: highest grade you attended in school? cest grade attended or check "None")	Elem High Colle		2345 234		₽		2345671	, (1)
	ish the grade (year)?						<u> </u>	N C	100
(For males) (For female	ar over, ask: you doing most of the post 12 months = : working or doing something else? s): keeping house, working, or doing something else? else" checked, and person is 45 years old or over, ask:		Under 1: Vorking Keeping Somethis	house			Under Working Keepin Someth	house	
b. Are you ret			Yes			□ No	☐ Yes		□ No [
NOTE: Beginning self. Che the questi	with Questian 9, you must interview the sample person for him- ck the appropriate box and follow the indicated order of asking ons.	=						MPLE PERS continue in	
9. Were you sick 2-week period a. What was ti b. Anything a			Yes			☐ No	☐ Yes		□ №
10. Last week or I	the week before did you take any medicine or treatment for any idea which you taid me about)? anditions?	0	Yes			☐ No	☐ Yes		רא □ No
	the week before did you have any accidents or injuries? they?	· 🗆	Yes			□ No	Yes		N₀
offsets you in	doss It bother you? (Record present effects)		Yes			□ Nọ		the grade of the con-	
13. Have you had	any of these conditions DURING THE PAST 12 MONTHS?		Yes			□ No			
(Read Card A.	condition by condition; record any conditions mentioned.)	<u> </u>							
14. Da yau have n	ny of these conditions?		Yes			□ No			
(Read Card B,	, condition by condition; record any conditions mentioned.)		_						
with your heal			Yes	•		□ No			
present effe	condition? (Record condition itself if still present; otherwise record ects.) rabisms with your health?							ata da a a a a a a a a a a a a a a a a a	
18. a. Have you b	een in a haspital at any time during the past 12 months?		Yes			□ No			
b. How many t	times were you in the hospital during that period?	=		_Na. o	(times				
during the p	een a patient in a nursing home, rest hame, or any similar place post 12 months? :: Ilmes were you in a nursing home ar rest hame during that periad?		Yes	_No. o	ftimes	□ No			*
1			Respons		<u> </u>		Resident	ded for self	11 TO 12 COR
R	For non-sample persons 17 years old or over, show who responded for Q. 9-11. For persons under 17 show who responded for them.	اب) <u>'</u>	c-pg6			(SP)		s respondent	0



						_	
Last axme	(1)	Last name	0	Last name	0	Last name	0
First name and initial		First name and initial		First name and	Initial	First name and	initial
Relationship		Relationship		Relationabip		Relationship	
Age	ler 1 year	Age	ler 1 year	Age] Under 1 year	Age	Under 1 year
☐ Vbite ☐ Negro [Thite Negro			Negio Other	 	Negro Diber
Male Female		Male Female		Male Female		Maje Female	
Targones No	parated	Under 17 Married Sep Widowed Ne Divorced Ma	arated	Ur Married Widowed Divorced	der 17 years Separeted Never Martied	Married	er 17 years Separated Never Married
Undet 17 years Elem: 1 2 3 4 ; 6 7 High: 1 2 3 4 College: 1 2 3 4 5+ None Yes No		Uoder 17 years Elem: 1 2 3 4 5 6 7 High: 1 2 3 4 College: 1 2 3 4 5+ None		Under 17 ; Elen: 1 2 High: 1 2 College: 1 2 None	3 4 5 6 7 8 C	Under 17 y Elem: 1 2 ! High: 1 2 ! College: 1 2 ! None Yes	345678 C
Under 17 years Working Keeping house Something else		Under 17 years Vorking Keeping house Something else		Under 17) Vorwing Keeping b Something	nuse .	Under 17 y Sorking Keeping bo Something	-
Yes	□ №	☐ Yes	□ No	☐ Yee	□ №	□ Y••	□ No
and Tebler C-1, H and F non-sample persons only		f. THEN esk Q. 9-11 esc	Table C-2	for non-mample ;	peteons.		
□ Yee	∏ No	☐ Yes	□ No	☐ Yee	☐ No	□ Y••	No
Yes	□ No	☐ Yee	No	☐ Yes	□ No	☐ Y++	□ No
Yes	□ No	Yes	□ No	☐ Yes	☐ No	☐ Yee	□ No
A STORE TO	Cap with the	7.1	Same Control	main. In the same			-
FILL ITEM R. THEN	FILL TAB	LE C-2 FOR CONDITION	S REPORT	ED FOR HON-S	AMPLE PERSONS	Lacara	10 m
·				grass to the	, 4		
		e and American	**		-	-	•
				*			
	. !						
					k		
· .			•				
			, s.v. 1 v	Percentage variable			
	•	:	·	1			
Responded for self		Responded for self		Responded	for sail	Responded	for salf
Colwes respondent	0	Colwes respondent	3		\odot		\circ
·p			_	Cr:,wsa re	*pondent	Colwes ter	apondene 🔾



							TABLE	C-1 (For SF	ONL	(): Fill on	e line of Table C-1 for
	Col. No. of per- son	Ques- tion No.	Name of condition *s reported in Questions 9-17	Did you EVER of any time talk to a doctor about	present effects o (s) If doctor talk What did the doc it was? did a medical name? (b) If doctor not	fold injuries: ed to: tor soy he give it talked to: nel entry and (c-5) as ice during	An Impair ot a Sympton	ment,		ı	Ask only if: 6 years old or over and blind- ness, poor vision, or eye trouble of any kind. Con you see well enough for read ordinary newspaper print with glasses?	Cyst "Disease"
	(e)	(b)	(c)	(d)	(e-1))		(e-:	2)		(e-3)	(~4)
1	(SP)	1		☐ Yes						x	☐ Yes *	×
2	⅌			☐ Yes						×	☐ Yes *	x
3	(P)			☐ Ye∎						×	☐ Yes ^X ☐ No	x
4	(SP)			☐ Yes						x	☐ Yes ¤	K
5	®			Yes					_	ĸ	Yes x	*
6	(SP)			☐ Yes						×	Yes z	I
,	(SP)			☐ Yes						x	Yes T	x
Col. No. of	Que tion No.	(one	r sold that you were in the co, twice, etc.) during the co did you enter the hose	a past ye	1 How mony	Complete fro	m entries	in Col	lumns (e pd ask	c) tbe	For what constall	for each hospitalization andition did you enter the do you know the medical name not known, enter
on		(En	ter month, day and year; c not known, obtain eati (c)	if exact	(if exact number not known accept bear estimate) (d)	How many of these nights were in the past 12 months?	these nights w lost wee the week before?	rere ik or	Were y atill in hospit fost Si night?	olon Andony	respondent	's description) t show "Cause," '"Kind," of body" in same detail as Table C-1)
(<u>•)</u>) (b)	+	Month Day	Year	Nighte	Nights	Nighte I		Yes	No		(h)
(SP)	1		, ,			 	+ !		 			
9 9			; — ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;									



	Question	s 9-17	for the	Sam	ple Pers	on.							
Ask only for: Impairments and injuries And for: Abscesses Inflammation Aches Neuralgia Bleeding Neuritis Bloid Clot Pains Boils Sores Cancer Soreness Cyst Tumor Growth Ulcers Infection Weakness What part of the body is affected?	If G-16 pld msk: flaw ma days die kum you from mchool week or week or	yrs.	How mode days di kee you from your jol or busti last we or the v before? Enter n of days check 'None' and ask Col. (h.	ony d p p n b ness sk veek umber	During to week period he many do did keep yo in bed all or more than the do life any "days" entered Cols. (got (h)) to Col.(ow sys iu iost sys'	Ask ON "Nane" checker Cals. (gin): LAST WOR THI WEEK BEFOR cau to cut d the thin usually	E did	Ask ONLY if "Yes" in Col. (i): Did you have to cut down for as much as a day?	When did you first notice? (Check the first box which applies)	When did you last use or talk to a doctor about? Enter month and year if outing past 12 months. 12 months wise check ""before 12 months" or "months" or "box box "box "box "box "box "box "box	Ask only if doctor seen during the past 12 months During the past 12 months about how mony times have you seen or tolked to a doctor obout?	
Eor or eye - (one or both) Head - (Skull, scalp, face) Bock - (Upper, middle, lowet) Arm - (Shoulder, upper, elbow, lower, wrist, hand; one or both) Leg - (Hip, upper, knee, lower, ankle, foot; one or both) (c-5)	(f) Days	\	(g)	 None	(h) Days N	ione	(i Yes		(j) Yes No	(L)	(1)	(m)	
			1		l i			 	1	[] last 2 wks. [] before [] 2 wks3 mo. 12 [] } +12 months months	M/YB. 12 mo.	No. of times	1
K			 		-			 		[]] last 2 wks. []] before []] 2 wks3 mo. 12 []] 3-12 months months	M/Y [] H, 12 mo. [] Never	No. of times	2
ĸ	DOES				-			 		[] last 2 wks. [] before [] 2 wks.+3 mo. 12 [] 3-12 months munths	M/Y [] B. 12 mo. [] Nev.r	No. of times	
x	APF	PLY								[last 2 wks.] before [] 2 wks. 3 mo. 12 [] 3-12 months months	[] H. 12mo.	No. of times	1
x	1		 					i		[] last 2 wks.	M.'YB. 12 ma.	No. of times	,
x			1		1				1	last 2 wks. before 2 wks3 mo. 12 3-12 months months	☐ B. 12 ma.	No. of times	6
х		l	1					 		last 2 wks. beloze 2 wks3 ma. 12 lb 3-12 months months	M/Y [] 8, 12 mo [] Never	No. of times	7
reported in Questions II Were any operations performing this stay of the ha If "Yes," ask: a. What was the name of operation?	rmed an y spital?		What (Ent	is the	name of	nd a	ddress o	f the h	aspital ya	ou were in? on which it is county.)		NOTE TO INTER- VIEWER	
b. Any ather operations?													
Yes I If "Yes," name of ap	eration, et	ıc. No		Na	me of ho	spits		Ser	(<u>i)</u>	Address		After Completing	
(i)	eration, et	tc. No		Na	me of ho	spits	<u>-</u>	Str	ect y and	Address			



					T/	ABLE C-2 FOR NON-SAMPLE	I PERSONS	ONLY: 'Fill one line of
Line number	Cal. Na. of per- son	Ques- tion No.	Name of condition as reported in Questions 9-11	Did you EVER at enry time tells to a dector about	Ask for all libesees and present effects of old injuries: (a) if doctor talked to: What did the dester cay it was? did ha give it a medical name? (b) if doctor not talked to: Record original entry and ask: (e-2, (e-5) as tequired. Ask for all injuries during past 2 weeks: What part of the body was hur!? What had of injury was it? Anything else?	Ask if the entry in Col. (e-1) is: An impairment, or a Symptom What was the sause of ?	bilodness,	Ask for any entry in Coi. (e-1) or Coi. (e-2) that includes the worder Asking "Condition" (Cyet "Disease" Stroke "Trouble" What kind of to it? "For an allergy or stroke ask: Haw does the allergy (stroke) effact you?
	(a)	(b)	(c)	(d)	(e-1)	(2)	(-3)	(5-4)
1				□ Y••			No	*
2				Yes No			☐ Yee ^X	3
3				Yes No			☐ Ya• *	
4				☐ Yes			Yes No	
,				Yes No		1	☐ Yee *	1
6				Yes No		*	Yes X	
7				Yes No		*	☐ Yee *	,
9				Yes No			Yee *	
3				Yes No		I	□ Y•• * □ No	
10				Yee No			Yee *	
Ę					SO TO FRONT OF QUESTIONN	AIRS		
F	ОИТО		÷					

ak only fort mpairments and injuries and for: haceases laflemmation haceases Neuralgis Bloeding Neurits Blood Clot Palas Boils Sores Lancar Soreness Cyst Tumor Frowth Ulcers Infection Waskness hat part of the body is affected? Show detail for: Ees or eye - (one ot both) Haded (Skull, scalp, face) Back - (Upper, middls, lower) Arm - (Shoulder, upper, show, lower, wrist, hand; one or both)	If 6-16 old ank How me days di kee you free school week to Enter n of days check and ski Col. (h)	my in	before	more many ild eep om el lineas reek "" number ys or a" sk	During to 2 week period to many de did	days" in	Ask ONL: "Nooe" of in column of the column of the well of the column of	checked is (f) or is): EK OR EK dis syou we on a you ic?	Ank online of the column of the cut of for an in an ide	(i): have own weh	When did you fire, notice ? (Check the first box which applies)
Log - (Hip, upper, knee, lower, ankle, foot; one or both)	1	6)	l u	s)	(1	1)		i)	G	}	ļ
(e-5)	Daye	None	+	None	Days	None	Yee	No	Yes	No	(lt)
			<u> </u>	! !				! !			last 2 wks. before 2 wks5 mo. 12 3-12 mosths months
,		 	1	 -				 			last 2 wks. before 2 wks3 so. 12 3-12 months months
		!		! !	<u> </u>	<u> </u>	<u> </u>	<u> </u>		1	inst 2 wks. before 2 wks3mo. 12 5-12 months months last 2 wks. before
		! ! !	1	i ! !	<u> </u>) 		1	<u> </u>	ì 1 1	2 wks3 mo. 12 3-12 months months
	*		_			! ! ! }	-	<u> </u> 	-	<u> </u>	2 wks3 mo. 12 3-12 months month
	1	1 1 1	_	1	_	<u> </u> 	-) 		<u> </u> 	2 wks3 mo. 12 3-12 months month last 2 wks. before
	1		-	1		!	-	1	<u> </u>		2 wks3 mo. 12 3-12 months month
	*		-	-	-	<u> </u>			·	<u> </u>	2 wks3 mo. 12 3-12 months month
	*	1	-	-	-	1	+	<u> </u>	-	<u> </u> 	2 wks5 mo. 12 3-12 months month inst 2 wks. before 2 wks3 mo. 12
		!	_	<u>i</u>	<u></u>	<u> </u>		<u> </u>]	<u> </u>	3-12 months month



Γ-	TABLE P	Name of Sample F	erson			
P-1.	Have you ever been advised by a doctor to limit the amount or to evald	enticaly	Yen	-		
	certein kinds of food or beverages? If "Yes," ask:				L	
	a. For what reason at condition? b. Are you still following this advice?		Yen			 □ No
P-2.	At the present time are you regularly taking any medicine or treatment in	er any	☐ Ya s			 □ No
	condition? If "Yes," esk:				L	140
	a. For what condition?	_				
P-3.	Do you have any condition which often causes you pain or discomfort? If "Yee," esk: a. What is the condition?		Yes.			_ No
P-4.	Do you have any health problem which is a source of worry to you are att your family? If "Yes," saks	er members of	☐ Yes		C] No
	o. What is the problem?					
P-5.	(Far males): Are you limited in any way in the amount or kind of work because of your health? (For females): Are you limited in any way in the amount or kind of house.		☐ Ye∎	-	C	N₀
	do because of your health? If "Yes," sak:	ework you can				
	o. What condition causes this?					
P-6.	in general, would you say your health is excellent, good, fair, or poor?			Excellent Fair	Good Poor	
	PRESPONDENT CARD TO P-7 (FORM NHS-5-13-6) Listed on this card ore several conditions. Please place an "X" appose people would talk about each condition in an interview like this that	its each condition s, if they or some	which Indi	cates how freely ser of their famil	you think most oth y had the condition.	•r
P-8.	a. Did you work at any time during the past 2 weeks? If "No." ask P-8-b and P-8-c:		☐ Yes			_ No
	b. Even though you did not work during that time do you have a job or b. c. Were you tecking for work or an layaff from a lab?	faconiau	Yes		_	∏ No
P-9.	What is the name and address of the dactor or clinic you usually go to fi medical advice or treatment?	M NOOF CHAT				
	a. During the past 12 months about how many times did you see or visit or clinic named)? TOU YOU SAID		Number o	ftimes		
i	b. Basidee (the doctor or clinic named above) did you see or vinit any a during the post 12 months?	ther dactor	Yes Yes		No (00 to P-1	0)
			Name and	deddress		
	If "Yes," sak: Who was this? (Enter name and address)	ł				
		[·	
	c. How many times did you see him during the past 12 months?		Number o	f times		
	d. Did you see any other dactors during the past 12 months?		[] Yes	*	No (00 to P-1	0)
			Name spe	daddress		
	Tr tista () 1. Mrt					
	[["Ycs," ask: Who was this? (Enter name and address)	i				
	e. How many times did you see him during the past 12 months?		Number o	f times		
P-10.	in conjunction with this survey we sometimes need to obtain additional from medical and haspital records. In case you are selected as one of for whom we wish to obtain additional information will you please sign.	hasa persona his form	MI Signe		RIZATION FORM	
	(present release - Form NHS-S-13-7) which allows us to consult your he to obtain this information.	olth records	Refu	sed: (Entar roas	ron)	
	TO INTERVIEWER: If interview not yet completed for non-sample persons. Otherwise, go to front of questionnal.		restion 9 (c	on inside of que	stionnairs) and ask	_

FORM NH8-9-13-2 (8-4-62)

Version Two of Questionnaire

RECORD Itam 1 Cota 2 Com 3 Com 4 Com	FORM NHS-S- (9-4-62)	115		DEPARTMENT OF THE	E CEHOL	J 8				1. Quention	OAite		
ADDRESS A. Address or description of location D. Mailing address if not shown in (a): Include city and State A. Setial No. Which of these income groups represents your total family income for the past 12 months, that 15, your 2, your 15, leads income groups represents your total family income for the past 12 months, that 15, your 2, your 15, leads income statives, etc. What is the telephone number here? Telephone No. Telephone No. Telephone No. If sample person has not been interviewed box interview has been completed for other related members, esk: As I mentlened earlier, in each household we ask some special questions about one person for himself only. In this care, is is										of			
b. Mailing address if not abown in (a): Include city and State 4. Serial No. Which of these income groups represents your total family income for the past 15 months, that is, your's, yourn's, etc. (Show Cand H). Include income from all sources, such as wages, salaries, rants from property, panalons, halp from relatives, etc. What is the telephone number here? Telephone No. Telephone No. It ample person has not been interviewed but interview has been completed for other related members, esk: As I mentioned earlier, in each heurschild we esk some special questions about one person for himself only. In this case, it is would be able to see him (or her)? (Enter best time to call). RECORD OF CALLS AY HOUSE. HOUSE. HOUSE. HOUSE. HOUSE. Time Time Time Type A Type B Type Z		l a Address so			IN 30								
Which of these income groups represents your total family income for the past 12 months, that is, your's, your-'s, etc? (Show Card H). Include income for mell sources, such as wages, salaries, rants from property, penalons, help from relatives, etc. What is the telephone number here?	. ADDRESS	w. Address or	aescription :	or idention		**				S. Aeeigois	EBE NO.		
What is the telephone number here? Telephone No. If sample person has not been interviewed but interview has been completed for other related members, eak: As I mentioned earlier, in each household we ask some special questions about one person for himself only. In this case, it is		b. Mailing add	ress if not a	bown in (a): I	aclude (city and State				4. Setial No),		
Mind to the telephone number here? If sample person has not been interviewed but interview has been completed for other related members, esk: As I mentioned earlier, in each heusehold we ask some special questions about one person for himself only. In this case, it is	Which of t eta? (Sho help from	hese income gro w Card H). Inclu relatives, etc.	upe rapresen de Income fr	rts your total formall sources	mily in	come for the p as wages, sale	ost lå t	nonths, that is, nts from proper	your's ty, pen	, your1s, slons,	Grou	-	
As I mentioned earlier, in each household we ask some special questions about one person for himself only. In this case, is is	. What is th	e telephone num	ber here?		Telep	hone No.					None		
RECORD Itam 1 Coca. 2 Com. 3 Com. 4 Com.	As I ment only. In a	laned earlier, in his case, it is _	each heusch			iai questions c	no tuodi	e person for hi	mself				
RECORD Itam 1 Coca. 2 Com. 3 Com. 4 Com.		•								Date		Time	
REASON TYPE A TYPE B TYPE Z			_		. – .	,	nter be	et time to cell)					
CALLS AT HOUSE. HOUSE. Household Time Record of Col.No. SP for Sample Person Time REASON TYPE A TYPE B TYPE Z		Itam	<u> </u>	1 1	Coa.	2	Com.	3	Com.	4	Com.	5	Co
Racord of Collhocks for Sample Person Time Time Type B Type Z	CALLS AT HOUSE.					 							
FOR		Collhacks : for Sample	SP Date										
	. REASON		TYPE A				TYPE B				TYI	PE Z	
INTER- VIEW No one at home - repeated calls Temporarily electic Other (Specify) Temporarily electic Other (Specify)	NON- INTER-	Tempora	rily obsent	ested calls						Sample 1	Person	^	
												 -	
0. Signature of interviewer 11. Code	O. Signature	o of interviewer								11. Code			
COTHOTES			<u> </u>										_
	OOTHOTES	·											



(alumn)	nume of the head of this household? (Enter name in appropriate	Last name	®	Last Dame	①
live here)	a names of all other paraons who live here? (List all persons who	First name and initial		First name and initial	
tempotarily d. Away nn bu	In a hospital?				
f. is there on	yone also staying here now? No Yes (Liet)				
	elated to the head of the household? (Enter relationship to nple: head, wife, daughter, grandson, mother-in-law, etc.)	Relationably		Relationship	
3. How old were	you on your last birthday?	Age Under 1	year	Age □ Uod	er I year
d. Race (Check	one box for each person)	■ White ■ Negro ■ O	tber	White Negro [Ocher
5. Sez (Check or	ne box for each person)	Male Female		Maje Female	_
If 17 years ol	d of over, ask:	Under 17 years		Under 17 ye	enra
6. Are you now r (Check one be	norried, widowed, divorced, separated, or never married? p.z. (or cech person)	Martied Separe Widowed Never Divorced Martiec		Wadowed 1	Separeted Never Married
7 n What la th	d or over, sak: s highest grade you attended in school?	Under 17 years Elem: 12345678	(SP)	Undet 17 years Elem: 1 2 3 4 5 6 7	, (1)
(Circle hig	hest grade attended or check "None")	High: 1234 College: 12345+ [7] None		High: 1234 College: 12345+	
<u> </u>	nish the grade (year)?	Yes No			No
	d or over, esk:	Under 17 years		Under 17 years	
f /Formales	you doing most of the past 12 months —): working or doing something else?	Keeping bouse		Leeping house	
	es): keeping house, working, or doing something else? else ¹¹ checked, and person is 45 years old or over, sak:	Something clas		Something else	
b. Are you re		Yes	☐ No	□ Yes	□ №
NOTE: Beginningself, Chathe quest	g with Question 5, you must interview the sample person for him- eck the appropriate box and follow the indicated order of asking lens.	Sample Person home and Sample Person not at hos			-
9. Ware you elch	et any time LAST WEEK OR THE WEEK BEFORE? (That is, the	Yes .		Yes	
o. What wos			٠		
b. Anything of	ike week before did you take any milicine or treatment for any				
condition (be	aldes which you teld me about)?	☐ Yes	No	₽ Υ••	□ No
a. For what a					
1	the week before did you have any accidents or injuries?	☐ Yee	∏ No	□ Y••	No No
b. Anything		}			
yourself?	PAST 12 MONTHS, have you eeen or talked to a dector about	Yes	<u>N</u>		THE ST
If "Yes," as		}			
b. Any other	conditions?	<u> </u>			
some health i		Y••	□ No		
	Itlen coused this change?	!		34	
b. Do you sti	Y if not previously recorded and wak: If have this condition?	Yes DNo (D	1010)		1
14. Here you eve because of se If "Yes," as	r had to make ony other change in your way of delny things me health condition? 	Tale Tale	№		
a. What cond	ition covered this change? (if not previously recorded and ask:			The same of	\$ F.
	It not previously recorded and was:	Yes No (De	lete)		
15. Have you eve in any wey?	r had any other Illness or Injury which bothers you or offects you	☐ Yee	<u></u> №		
	he present effects?				
16. Have you EV	ent conditions card with "A" side up and pencil, then say: ER had any of the conditions listed on this coud? Places check o" for each one listed.	All No's			
Ask responde 17- Have you had Please check	or to turn card over (to "B" side), then sey: eny of these conditions DURING THE PAST 12 MONTHS? "Yes" or "Na" for each one listed.	All No's			,
If "Yes,"] No		
	times were you in the heapitel during that period?	No. of times			
19. a. Kove you be during the If "Yee," asi	wen a patient in a nureing home, reat home, or any elmiler place past 12 months? ::	Y ***	N∘		
	fimes were you in a nursing home or rest hom during that period?	No. of times			
R	For non-aample persons 17 years old or over, show who responded for Q. 9-11. For persons under 17 show who responded for them.	Responded for self	®	Responded for self	Ö

Last name (2)	Last name (3)	Last nume	Last name
First name and initial	First came and initial	First name and initial	First name and initial
	<u></u>		
Relationship	Reletionship	Relationship	Relationship
Age Under 1 year	Under Lyses	Under 1 year	Age Under I year
☐ White ☐ Negro ☐ Other	☐ White ☐ Negro ☐ Other	☐ White ☐ Negro ☐ Other	☐ White ☐ Negro ☐ Other
Male Female	☐ Male ☐ Female	☐ Male ☐ Female	Male Female
Under 17 years Married Separated	Under 17 years Married Separated	Under 17 years Married Separated	Under 17 years Separated
Widowed Never Divotced Matried	☐ Vidowed ☐ Never ☐ Divorced ☐ Married	Widowed Never Divorced Married	☐ Widowed ☐ Naver ☐ Divorced Married
Under 17 years (2)	Under 17 years (3)	Under 17 years (4)	Undet 17 years
Etem: 12345678 High: 1234	High: 1234	High: 12343678	Elem: 12345678 U
College: 12345+	College: 1 2 3 4 5+	College: 1 2 3 4 5+	College: 1 2 3 4 5+
Yes No	Yes No	TYes No	Yes No
Under 17 years Working	Under 17 years	Under 17 years Working	Under 17 years Working
☐ Keeping house ☐ Something else	☐ Keeping house ☐ Something else	Something class	Something else
□ Y•• □ №	Yes No	Yea No	Yes No
	II. THIN est Q. 9-11 and Table C-2	for non-nample persons.	
non-sample persons only.			
Yee No	☐ Yae ☐ No	Yes No	☐ Yes ☐ No
[-			
Yes No	Yes No	Yee No	Yes No
			_
Yes No	Yes No	Yes No	Yee No
		_	_
	Messaga and a constraint		
FILL ITEM R. THEN FILL TAB	LE C-2 FOR CONDITIONS REPORT	ED FOR NON-SAMPLE PERSONS	
		•	K riston e e e
			c
			52. 4
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00			
34			
	<u>*************************************</u>		
•			
Responded for self	Responded for self	Responded for self	Responded for self
Col. Teatropert of (2)	1 -	C	(3)



						TABLE C-1 (For SP ONLY): Fil! on	e line of Table C-1 for
Line number	Col. No. of per- son	Question No.	Name of condition as reported in Questions 9-17	Did you EVER at eny time tolk to a doctor obour 7	Ask for all illnesses and present effects of old injuries: (a) If doctor talked to: Whot did the doctor say it was? did he givs it a medical name; (b) If doctor not talked to: Record original catty and ask: (e-2) - (e-5) as required. Ask for all injuries during past 2 weeks: What part of the body was hur? Anything size?	Ask if the entry in Col. (e-1) is: An Imperiment, or a Symptom What was the cause of ?	Ask only if: 6 years old or over and blind- ness, poor vision, or eye trouble of any kind Cen yeu see well enough to reed ordinary newspoper print with glasses?	Ask for any entry in Col. (e-1) or Col. (e-2): that includes the words Allergy* Tumor Condition 'Disease' 'Disease' 'Trouble' Stroke' What kind of is 1:? *For an allergy or atroke sate: *How does the ollergy (stroke) affact you?
L	(a)	(b)	(c)	(d)	(e-1)	(e-2)	(e-3)	(e−4)
ı,	®			☐ Yes		x	Yes *	
2	®			Yes No		x	☐ Yea ^X ☐ No	ж
,	®			☐ Yes		X	☐ Yea [™]	x
4	(SP)			☐ Yes		я	Yes *	*
5	9			☐ Yes		x	☐ Yea z ☐ No	1
6	(8)			☐ Yes		I	Yes z	×
7	(9)			☐ Yes		I	Yee *	I

	_			_		TA	BLE H (For	SP ONL	.Y):	Fill o	e line	of Table H for each hospitalization
	Col. No. of	Ques- tion No.	You said that yo (once, twice, at	c.) during t	ha past yeat	How many nights were you in the	Complete from and (d); or, si que stions	catries ow cale	in Col	umos (pd as)	r jes c)	For what condition did you enter the hospital do you know the medical name?
A B	per- son		When did you en last time)? (Enter month, di date not known,	ay and year	il exact	hespitel? (If exact number not known accept best	Hew many of these nights were in the past	these - nights v last we	were were	ore y st. ! ! losp!! lost S	n the slon	(If medical name not known, enter respondent's description) (Entry must show "Cause," "Kind," and "Part of body" in same detail as required in Table C-1)
Libe	(a)	(ь)	Month	(c)	Year	estimate) (d) Nighte	12 months?	the wee before? (i) Nighte	L	night?	<u>)</u>	required in Table C-1) (h)
ı	9			 		*			 			
2	9			 	 				! ! !			
3	9			1 1	i				 			

FORM HHS-8-15-2 (9-4-62)

each condition reported in (uestio	ns 9-1	for th	e Sam	ple Pe	erson.							
Impairments and injuries And for: Abscesses Inflammarium Achea Neuralgia Bleeding Neuritis Blood Clot Pains Boila Sores Cancer Soreness Cyst Tumor Growth Ulcers Infection Weskness What part of the body is offected? Show detail for: Eor or eye (one or both) Hand (Skull, scalp, face) Bock (Upper, middle, lower) Arm (Shoulder, upper, e'bow, lower, wrist, hand; one or both)	If 6-16 pld est flow m days d vy k you fro school week b	any Id ap Id ap Idat ir he resore?	How m days d ke. you free your je or bus lost w or the before Enter of days check "None and as Col. ()	id ap ap ab inese esk ? number s, or k	2 wer perio mony did. kesp in be ail or af the	d haw days you d most day? you d most day? y s i (s) skip 1.(k)	Ask Of "None" checker Cols. (h): LAST NOR TH WEEK BEFOR could the thir usually	d in g) end WEEK E RE did se you lawn on las you do?	Ask ONLY if "Yes in Col. (i): DId you have to cutdowr for as much as a doy?	(Check the first box which applies)	When did you last see or took to a doctor about? Enter month and year if during past 12 months; otherwise check "before 12 months" or "never" box	Ask only if doctor seen during the past 12 months: During the past 12 months to both how many times have you seen at tolked to a doctor obout?	Line number
Log · (Hip, upper, koee, lower, enkle, foot; one or borh) (e-5)	F	4	Deys			None			Yes No	(k)	(1)	(m)	
1		1		1		 		1		lest 2 wks before 2 ks3 mo. 12 3-12 months mosths	M/Y B. 12 mo. Never	No. of times	,
1		 		-				; 		18 sr 2 wks. before 2 wks3 mo. 12 3-12 months months	M/Y [_] B. 12 mo. [_] Never	No. of times	2
	DOES	нот		 					1	last 2 wks. [] before 2 wks3 mo. 12 3-12 months months	M/Y [] B. 12 mo. [] Never	No, of times	3
T.	AP	PLY		-				3	1	last 2 wks. before 2 wks3 mp. 12 3-12 months months	M/Y	No. of times	4
x		 		 						lest 2 wks. before 2 wks.+3 mo. 12 3-12 months , mnoths	M/Y B. 12 mo. Never	No. of times	5
		1		 				 		lssi 2 wks before 2 wks3 mo. 12 3-12 months months	M/Y B. 12 mo. Never	No. of times	6
×				1				1	1	last 2 wks. (before 2 wks. 3 mo. 12 3-12 months months	M/Y [] is, 12 mo. [] Never	No, of times	7

Were any aperations performed on you during this stay at the hospital?	What is the name and address	of the hospital you were in?	
if "Yes," ask: Whot was the name of the operation?	(Enter full name of hospital, located, city and State; if cit	street or highway on which it is y not known, enter county.)	TO
Any other operations?			INTER- VIEWER
(i)		(i)	After
Yes I If "Yes," name of operation, etc. No	Name of hospital	Address	Completing
i	<u> </u>	Street	
		City and	Table II
i T		Street	Table P
		City and State	
i		Street	
1		City and	
		i State	I

USCOMM-DC



					TABLE C-2	FOR NON-SAMPLE PERSON	S ONLY	Fill one line of Table C-2
Lies amakes	Col. No. of per- sce	Ques- tion No.	Name of condition as reported in Questions 9-11	Did you EVER at ony time rails to a dealer about ?	Ask for all lilnesses and present effects of eld injuries; (a) if doctor talked tel What did the dector say it was? did he give it a medical name? (b) if doctor so talked tol Record original entry end ank (e-2) - (e-3) au required. Ask for all injuries during past 2 weeks! What part of the body was hart? What hard of injury was it? Anything else?	Ask if the entry is Col. (9-1) is: An impairment, of a Symptom What was the sauss of ?	of over ead biladaese, poor vision,	Ask for any satty in Col. (e-1) or Col. (e-2) that fectules the words! Allergy* Tumor Asthma "Conditioe" Cyst "Discasse" Strakes "Trouble" Whet kind of le 197 °For an allergy er stroke askt How does the allergy (strake) affect you?
L	(a)	(b)	(e)	(4)	(e-1)	(c- 2)	(0-3)	(e-4)
1				☐ Yes			U Yee I	•
2.				Yes No		•	Yes E	
5				Yes No			Yes *	*
4				Yes No			Yes No	1
3				Yes No		1	Yes I	2
6				Yes No			Yes *	Z.
7				Yes No		1	☐ Yes 1	•
				Yes No			Yes "	2
9				Yes		ı.	Yes Z	2
10				Yes No		1	☐ Yee *	
							.GQ TO FR	ONT OF QUESTIONNAIRE
	онто	TES						

sk only for: mpairments and injuries and fort becases inflemmation tches Newalpia Sleeding Newalpia Sores Soreness Lyst Tumor Frowth Ulcers Infection Waskness het part of the body is offected? Show detail fort Eer or eye (one or both) Leos (Skull, scelp, face) Soch - (Upper, middle, lowet) Arm - (Sboulder, upper, elbow, lower, wrist, hand; one or both)	If 6-16 old neb How me days di How me days di How scheel week o week b Euter rof days check and ak Col. (b	d p m last r the efore? sumber ot 'Nooe'	How a days wour lost worth to be for the character of day a Col.	nony did step sen shiness reek s week s? number ys or s	During 2 week period many didd keep y in bed most e day? If any enterection. (b) skii Col. (i	hew eys all or f the ''days'' d in (g) or p to	In column (g) and (t) LAST WE THE WE! BEFOR! cous to cut do the thing usually d If "Yes" ask Col.	in columns (f) or (g) sad (b); LAST WEEK OR THE WEEK BEFOR! did couse you to cut down en the things you usually dof if "Yes" checked ask Col. (j). If "No" aklo to		ly if in (i): have hown such y?	When did you first notice ? (Check the first box which spplice)
Leg · (Hip, upper, knee, lower, ankle, foot; one or both)	1 (r)	\ u	3)	(h)	į d	i)	l a)	
(e- 5)	Days	None	Days	None	Days	None	Yes	No	Yee	No	(k)
,		 		 		 		, 			last 2 wks. before 2 wks3 mo. 12 5-12 months months
		 	<u> </u>	i 	1	! ! !		. ! ! <u>}</u>		<u> </u>	last 2 wks. before 2 wks3 so. 12 3-12 souths souths
		i 	<u> </u>	 	_]] 		i i i			last 2 wks. before 2 wks3 mo. 12 3-12 months months last 2 wks. before
			-	1		1		! ! ! !			2 wks3 mo. 12 3-12 months months last 2 wks. before
		<u> </u> 		 		<u> </u>		 		_	2 wks3 mo. 12 5-12 months months months months months months 2 wks3 mo. 12
	K .	<u> </u>		! ! !		-	_	i			3-12 months months last 2 wks. before 2 wks3 mo. 12 3-12 months months
	E			! ! !		-		 		 	inst 2 wks. (before 2 wks3 sto. 12 5-12 months month
	2		1	1						! ! !	inst 2 wks. before 2 wks3 mo. 12 3-12 months month
	2		1	1						i !	inst 2 wks. before 2 wks3 mo. 12 3-12 months south
					•						



\bigcap	TABLE P	Name of Sample F	Person			
P-1.	(Deet not apply)	<u> </u>	I			
			1			
P-2.	At the present time are you regularly taking any medicine or treatment for condition?	er eny	□ Y••	_		□ No
	If "Yes," sak:		_			
P.1	a. For what condition? Do you have any condition which often eauses you pain or discomfort?					
	to you have any condition which arron sousse you pain or disconfort? It "Yes," ask: a. What is the condition?		□ Y••			☐ No
P-4.	Do you have any health problem which is a source of warry to you or oth your family? If "Yes," sak:	er members of	☐ Y•s			□ №
	a. What is the problem?					
P-5.	(Dees not eppiy)					• 1
						į
P-6.	In general, would you say your health is excellent, good, foir, or poor?			Excellent	_	
				Fair	Poor	
	RESPONDENT CARD TO P-7 (FORM NHS-5-13-6)	ite each condition	which india	area kou frank	was skink mass	
• • • • •	Listed on this cord are several conditions. Please place on "'X" appose would talk about each condition in an interview like this — that i	s, if they or some	other membe	of their famil	y had the condi	tion.
P-8.	u. Did you work at any time during the pest 2 weeks?		Yes			□ No
	If "No," sek 1986 and 1985; b. Even though you did not work during that time do you have a job or bu	raineas?	Yes			□ No
	c. Were you looking for work or on layelf from a jab?		☐ Yes			□ No
			Name and	address		ĺ
P•9.	What Is the name and address of the dector or clinic you usually go to formedical advice or treatment?	r Pour own				
		j			· . 	
	a. During the past 12 menths about how many times did you see or visit	(dactor	Number of	times	·	
	b. Besides (the doctor or clinic named above) did you see or visit any o	ther doctor	☐ Yes		☐ No (Oo to	P-10)
	during the past 12 months?		Name and	- 4.1		
	ar than an ar hill a de-	}	Name and	rdaress		1
	H "Yes," ssk: Who was this? (Enter name and address)					
		}				
	c. How many times did you see him during the past 12 months?		Number of	times		
	d. Did you see any other doctors during the past 12 months?		☐ Yes		☐ No (00 to	P-10)
			Name and	address		
	If "Van " anh. Who was thin? /Pater and address."	ļ				l
	II "Ics," sak: Who wat this! (Enter name and engress)				,	
		_				-
	e. Now many times did you see him during the past 12 months?		Number of	times		
P-10.	in conjunction with this survey we semetimes need to obtain additional	information	ME	DICAL AUTHO	RIZATION FOR	RM
	from medical and haspital records. In case you are selected as one of t for whom we wish to obtain additional information will you please sign t	hase persons this form	Signed	J		
	Gresent release - Form NHS-S-13-7) which allows us to consult your her to obtain this information.	uith records	Refuse	ed: (Enter ress	on)	
						
NOTE	TO INTERVIEWER: If interview not yet completed for non-sample pers	ions, go bock to Qu	restion 9 (on	n Inside of ques	itionnaire) and a	oak

FORM NHS-9-19-E (9-4-82)

Version Three of Questionnaire

									Form	Approved: Bud	get Bur	rau No. 68-R620-	F9.1
permit idea	stification of	the indiv	idual w	ill be held st	rictly c	of the B4th Cor onfidential, wi other purposes	ili be w	sed only by per	2 U.S.C #008 e	C. 305). All in ngeged in and	formet	purposes of the	!
FORM NHS-S- (8-4-82)	-13-3		E A DNIT:	EPARTMENT O	F CENE	UB I FOR THE				1. Question	on Re		-
				PUBLIC HEAL						of			
	1 411			NAL HEAL	TH 30	JRVET				Question			
2. ADDRESS	•. Addres	s of desci	nption o	of location						3. Assignm	ent No.		
	b. Mailing	address	if not e	hown in (a): is	aclude	city and State				4. Serial No),		_
ete? (Sho	these income w Catd H). I relotives, et	include in	epresen come fr	ts your total fo om all sources	mily in , such	come for the p	ant 12 :	months, that is, ints from prope	your's	, your's, selons,	Grou	P	
6. What is th	ne talaphone	number he	re?		Telep	bone No.					None		
As I ment only. In t		, In each Is	househo		na apec	lo l questions o	bout or	ther related mer no person for hi hat is the earli	meelf				
						. <i>(</i> E	nter be	at time to call)	. .	Date		Time	
8. RECDRD DF				Item 1 Com. 2 Com. 3 C				Com.	4	Com.	5	Com.	
CALLS AT HOUSE. HDLDS	Entii househ		Date Time										
	Record of Collbacks for Sample Person	Col.No. SP	Date 										
9. REASON		TYP	E A				YPE B				TYF	PE Z	
FDR HON. Inter- View	Tem		hsent	ated calls		(Specify, e.g., moved to				Intervie Sample I	Person	-	
10. Signature	of interview	ver	<u>.</u>							11. Code			
FOOTHOTES								_	·				



1. a. What is the	name of the head of this household? (Enter name in appropriate	Last name	(S P)	Lest name	(1)
t. What are the live here) c. Is there on temporarily d. Away on b	yone else who lives here who is now No Yes (List all persons who yone else who lives here who is now No Yes (List) walness?	First name and initial		First name and initial	
2. How ore you	yone else staying here now? Yes (List) related to the head of the household? (Eater relationship to mple: beed, wife, daughter, grandson, mother-in-lew, etc.)	Relationship		Relationabip	
<u> </u>	you on your last birthday?	Age	l vear	Age	idet 1 year
4. Rece (Check	one box for each person)	□ White □ Negro □	<u> </u>	□ White □ Negro	 -
5. Sez (Check o	ne box for each person)	Male Female		Male Female	
6. Are you now i	d or over, ssk: married, widowed, divorced, separated, or never married? ox for esch Person)	Under 17 years Married Separ Widowed Neve	7		years Separated Never Married
7. a. What leth	d or over, ssk: s highest grads you attended in school? best grade ettended or check "None")	Under 17 years Elem: 1 2 3 4 5 6 7 8 High: 1 2 3 4 5 College: 1 2 3 4 5+ None	(SP)	Under 17 years Elem: 1 2 3 4 5 6 6 High: 1 2 3 4 College: 1 2 3 4 5+ None	7,8
	nish the grade (year)?	Yes No			No
B. c. What were (For males (For femal	d or over, sak: you doing most of the past 12 months —); working or doing something else? cs): keeping house, working, or doing something else? , else'' checked, and person is 45 years old or over, ask:	Under 17 yeers Working Keeping bouse Something else	· -	Undet 17 years Vorking Keeping bouse Something else	
b. Are you re		☐ Yes	□ No	☐ Ye∎	☐ No
NOTE: Beginnin self. Ch the quest	g with Question 9, you must interview the sample person for him- eck the appropriate box and follow the indicated order of asking tions.	Sample Person bome an Sample Person not et b			
9. Were you sick 2-week period o. What was b. Anything o		Yes	N₀	Ye∎	□ No
10, Last week or condition (be a. For what i b. Anything		Yes	☐ No	Yes	□ No
11. Last week or a. What were b. Anything o		Yes	□ No	Yes	☐ No
12. Did you ever offects you in	have an (any other) accident or injury that still bothers you or a any way?	☐ Yes	□ No	All National Control	A TOTAL PROPERTY.
s. In what wa	ry does It bother you? (Record present effects) Ise?				
Hand respond	lent conditions card with "A" side up and pencil, then say: ER had any of the conditions listed on this card? Please check to" for each one listed.	All No's Yes's (One or more)		The second section of the section of the second section of the section of the second section of the sectio	1
14. Have you had	int to twn card over (to "B" side), then say: any of these conditions DURING THE PAST 12 MONTHS? "Yes" or "No" for each one listed.	☐ All No's ☐ Yes's (One or mote)			
your health	t time do you have any other aliments, conditions, or problems with besides any you may have checked on the card or any that you told condition? (Record condition itself if still present; otherwise	☐ Yes	∐ No		
tecord pres	ent effects) problems with your health?	1			. 44.
18. a. Have you b	een in a hospital at any time during the peat 12 months?	Yes No. of times	☐ No		
19. a. Have you b	seen a patient in a nursing home, rest home, or any similar place	Yes No. of times	□ No	A	~ ~~
during the	past 12 menths?	No. of rimee			
R	For non-sample persons 17 years old or over, abow who responded for Q. 9-11. For persons under 17 abow who responded for them.	Responded for self	(39)	Responded for sell	\odot



Last name	2) Last name 3	Last DEDQ 4	Last Came 3
First name and initial	First name and initial	First came and initial	First name and initial
Relationship	Relationship	Relationship	Relationship
Age Under 1 yea	Age Under 1 year	Age Under 1 year	Age Under 1 year
■ White. Nagro □ Other	White Negro Other	■ White ■ Negro ■ Other	White Negro Other
Male Female	Male Female	Male Female	Male Femsie
Under 17 yeats Married Separated Vidowed Never Divocced Married	Under 17 years Married Separated Widowed Never Divorced Married	Under 17 years Married Separated Widowed Nevet Divorced Married	Under 17 years Married Separated Vidowed Never Divorced Married
Elem: 1 2 3 4 5 6 7 8 High: 1 2 3 4 College: 1 2 3 4 5+ None Yes No	2 Under 17 years Elem: 1 2 3 4 5 6 7 8 High: 1 2 3 4 5 + College: 1 2 3 4 5 + None Yes No	Uader 17 years Elen: 1 2 3 4 5 6 7 8 High: 1 2 3 4 5 College: 1 2 3 4 5 None No	Under 17 years Elem: 1 2 3 4 5 6 7 8 High: 1 2 3 4 5 Collegs: 1 2 3 4 5+ None Yes No
Under 17 years Vorking Keeping bouse Something else	Under 17 years Varking Keeping house Something else	Under 17 years Vorking Keeping house Something else	Under 17 years Vorking Keeping bouse Something elss
Yes No			Yes No
and Tables C-1, H and P for him non-sample persons only.	eelf, THEN ask Q, 9-11 and Table C-2	for non-sample persons.	
Yee N	Yes No	Yes No	Yes No
☐ Y•• ☐ N·	Yee No	Yes No	Yee No
Yes N	Yes No	Yes No	☐ Yes ☐ No
FILL ITEM R. THEN FILL T	BLE C-2 FOR CONDITIONS REPORT	TED FOR NON-SAMPLE PERSONS	
		122 m	
Responded for self	Responded for salf	Responded for salf	Responded for celf
Col. was respondent	Colwas respondent	Colwes respondent	Col.—.wes respondent



			· · · · · · · · · · · · · · · · · · ·				TAB	LE C-1 (Per E	0%7	∀): F	ill cae line	of Table C	-1 for each	-
Line number	Col. No. of per- sco	Ques- tion No.	Name of cor reported in 9-17		Die yee EVER et eny tiene tells to a doctor chown	(a) If doctor to What did the d it westd a medical nam (b) If doctor a	of old injeries: liked to: octor say is he give it of ot talked to: ginal cutry and - (c-5) as uries during to body was ajery was bif	An Impei or a Sympto	inest,		-	Ask only if: iy years old or over and bined- scase, poor vision, or eye trouble of any kind Cen year sco well oneseph to recal ordinary newspeper print with glosses?	Allergy® Asthon	Tener "Condition "Disease" "Trouble" is it? ntgy or so allergy	·
	(a)	(Ь)	(c	:)	(d)	(0-	-1)		(e-)	2)		(e⊷3)	(e-	4)	
1	®	•			Yes						п	☐ Yes ^I			
2	(B)				☐ Yes						2	Yes *			
3	®				☐ Yes						R	Yes *		-	1
4	⊕				☐ Yes		_			,	*	Yes *		-	1
5	®				☐ Yes							☐ Yes z			
6	®				☐ Yes							☐ Yes x			
,	®			_	☐ Yes						*	☐ Yes ^E		*	•
					<u></u>	TABL	1 H (Par SP C	KLY):	Fili c	ae lise	of To	ple H for e	ech hospita	lizatica re	porti
Col. Vo. xi xi xir ver	Que tion No.	(6004	seld thet ye so, twice, etc a did yew ont theo)?	r) contag to	e post yes	How many alghta we you in the hospital? (If ages:	ded (d); cr, questions -	New ma	edere 	Tore y	.pa	hospital nemo? (If modical	endition did ée you know useze not kn 's descriptio	the medica own, ester	to ri
		(Ec	er month, da not knowa,		if ezact cote.)	number on knows accept be estimate)	in the post	these - uights w lest was the was before?	y sy es secus	hospic lost & night?	eien meey	(Estry sees	t show "Can of body" in t Table C-1)		85
(•)	(ь)	-	Mooth	(c) Day	Year	(d) Nighto	- (a) Nighta	Nistre i		Yes i		-	(b))	
P		\ \ \													
- 9		1		- i	,										
		\top		r i			1								

FORM KHO-6-13-5 (9-4-02)

condition reported in Quest	ions 9-1	7 for t	he Sam	ple P	etson.								
Ask only for: Impairments and injuries And for: Abscesses Inflammation Aches Neuralgis Blood Clot Pains Boila Sores Cancer Soregess	li 6-10 old asi flow m days d ker you fro school week a	any id P logit or he	How midays di kee you fro your jo or busi last we or the before?	d m b ness ek week	perior many did . keep in be- all or	d how days you	Ask ON "None' checked Cols. ((h): LAST Y OR THI WEEK BEFOR	d in g) and VEEK E	Ask ONLY if "Yes in Col. (i): Dld you have to cut down for as	When did you first natice? (Check the first box which applies)	When did you lost ses or tolk to a doctor about? Enter month and year if during past 12 months;	Ask only if doctot seen during the past 12 months: During the post 12 months obout how many	
Cyst Tumor Growth Ulcers Infection Yeakness Whot part of the body is offected Show detail for: Eor or eye - (one or both) Head - (Skull, scalp, face) Bock - (Upper, middle, lower) Arm - (Shouldet, upper, elbow, lower, wrist, hand, one or both)			Enter n of days check ''None' and asi Col. (h	, or ()	If any day enters	ed in (g) skip l.(k)	to cut d the thin usually	se you lawn on iga yau da?	muchos a day?		otherwise check "before 12 manths" or "never" box	times have you seen or talked to o dactor about?	Line number
Leg - (Hip, upper, knee, lower, ankle, foot; one or both)	/"	4	(8)	·			(i		(i) 				
(e-5)	Days	None \	Days	None	Days	None	Yes	No	Yes No	(k)	(I) M/Y	(m)	ļ
		! ! !						! ! !		last 2 wks. before 2 wks3 mo. 12 3-12 months months	B. 12 mo.	No. of times	ı
						İ		!		last 2 wks. before 2 wks3 mo. 12 3-12 months months	M/Y	No. of times	2
,	DOES	тон				! !		: ! !		last 2 wks. before 2 wks3 mo. 12 3-12 months months	M/YB. 12±0.	No. of times	3
1	AP	PLY				_		 		sst 2 wks. before 2 wks3 mo. t2		No. of times	4
<u> </u>		i !						!	j.	last 2 wks. before 2 wks3 mc. 12 3-12 months months	M/Y B. 12 mo. Never	No. of times	5
		i I I						i ! !		last 2 wks. before 2 wks3 c n. 12 3-12 months	M/Y B. 12 mo. N tver	No. of times	6
,		! !		ا ا				! ! !		last 2 wks. belote 2 wks3 mo. 12 3-12 months months	M/Y B. 12 mo. Never	No. of times	7
in Questions 18 or 1	9. (If n	o hosp	italizat	ion re	porte	l go t	o Table	P)]
Were any operations p during this stay at the	arformed	l on you	'	What I	s the n	ome G	nd od dre	ss of t	he hospiti	olyou were in?			
If "Yes," ask: a. What was the name operation? b. Any other aperation	of the			(Enter locate	full ni d, city	ane of and S	hospita	l, stree	t or high known, e	vay on which it is enter county.)		NOTE TO INTER- VIEWER	
(- - -				- - -		9		After	
Yes If "Yes," name	of operati	os, etc.	No		Name	of ho	spital		Street	Address		Completing	
1									City and			Table H	1
<u> </u>							_		State	'		go to	
l i									Street 			Table P	
									City and State				
									Street			1	
i			1						City and			}	1

ERIC

47

					TABLE C-2	POR NON-SAMPLE PERSO	NS ONLY:	Fill one line of Table C-
Lise aupber	Col. No. of per- ses	Quantina No.	Name of condition as reported in Questions 9-11	Did you EVER at smy time talk to a dector about	Ask for all illnesses and present effects of old injuries; (a) If doctor talked to: What did the doctor cay it was? did ha give it a medical name? (b) If doctor not talked to: Record original entry and sk: (a-2) - (a-5) as required. Ask for all injuries during past 2 weeks? What part of the body was hard that of injury was it? Anything also?	Ask if the entry in Col. (e-1) is: An impairment, or a Symptom Where was the couse of ?	Ask only iff 6 years old or over and blindness, poor vision, or eye trouble of any kind. Con you see well seemely to rood endirary newspoper print with pleases?	Ask for any entry in Col. (e-1) or Col. (e-2) that includes the words: Allergy* Tumor Ashma "Condition" Cyst "Disease" Stroke* "Disease" What kind of Is it? "For an allergy or stroke ask: It w does the allergy (stroke) effect you?
	(a)	(b)	(c)	(d)	(e-1)	(e~2)	(e-3)	(o-4)
1				Yes No		*	Yes X	ш
2				Yes		*	No Xee X	x
,				Yes No		x	Yes X	х
4				Yea		х	Yes X	E
,				Yea No		*	☐ Yea [#]	x
6				Yes No		x	☐ Yea X ☐ No	х
7				Yes No			Yes X	Т
8				Yes		x	Yea X	х
9				Yes		3	Yes X	и
10				Yes		1	Yes X	r
E					GD TO FRONT OF QU	EST!DHNAIRE		
	ЭОТНО Т	TES						



Aches New Bleeding New Blood Clot Pair Boils Sore Cancer Sore Lyst Tum Interview Ulce Infection Wes Book (Skull, seal) Soke (Skull, seal) Soke (Skull, seal) Soke (Skull, seal) Jower, wist, both)	mmation da da algia	6-16 yed ask: ow many ys did keep out from hool los sek or the tex before tex num days or tex los to keep or tex los to keep or tex los to keep or to ke	st he ore? aber r one?	If 17 ye old or a ask: How ma days dl key you from your lool or hus! lest we or the webefore? Enter of days check 'None' and said Col. (b)	my d sp n sek verk umber or	During 2 week period many d did	days11	Ask ONL "None" in column (g) and (l) LAST WE THE WEI BEFORE caus to cut do the thing usually d If "Yes" ask Col. "No!" sk Col. (k)	is (f) or i) (f) or EK OR EK OR e you with on s you of cbecked (j). If	Ask on Tyes!! column Did yoto cut for as es o de	(i): u have dewn much	When did you first notice ? (Check the first bor which applies)
ankle, foot; o	ne or both)	- (f)		(g)	!	(l		(i	} 			1
(c- 5)	D•	ye N	one	Days; 1	None	Days	None	Yes	No	Yes	No	(k)
	×	1		1								☐ last 2 wks. ☐ befor ☐ 2 wks3 mo. 12 ☐ 3-12 months mont
	x	.	Ì				-					last 2 wks. befor 2 wks3 mo. 12 3-12 months month
	×	.		1	-			_			_	☐ isst 2 wks. ☐ befor ☐ 2 wks3 mo. 12 ☐ 3-12 months month
	2	İ		!								last 2 wks. befor 2 wks3 mo. 12 3-12 months month
	I	1		1								last 2 wks. befor 2 wks. 3 mo. 12 3-12 months month
	-	 		!			_					last 2 wks, befor 2 wks3 mo. 12 3-12 months month
	E	1		1					1			last 2 wks. befor 2 wks3 mo. 12 3-12 months most
	I	 		1								last 2 wks. befor 2 wks. 3 zo. 12 3-12 months month
	2	† 		! !								Isst 2 wks. Defor 2 wks3 mo. 12 3-12 months month
	z	-		1	_							last 2 wks. befor 2 wks3 mo. 12 3-12 months month
		-		ı								☐ 2 wks.•3mo. 12



$\lceil \rceil$	TACLE P .	Name of Sample P	esson.			
P.1.	Nove you over been advised by a doctor to light the execut or to evold a screen kinds of food or boverages? If "Yes," ask:	entirely	☐ Yes			14o
1	a, For what reason or cardition? b. Are you still following this advice?		☐ Yee			□ No
P-2.	At the present time are you regularly taking any modifies or treatment is exaditive? If "Yee," $\infty 2\epsilon$	r ony	☐ Y:10			□ No
	a. Fer what candition?					
	Do you have any condition which often course you poin or discamfort? If "Yes," sals on What is the condition?		□ Yos			□ No
P-4.	Do you have any hoeith problem which is a source of warry to you or oth ware facility? ν "Yes," sobt	er mombors of	∐ Yes			₩
	a. What is the problem?		<u>. </u>			
P.L	(For males): Are you (insted in any way in the amount or kind of work because of your health? (For females): Are you limited in any way in the amount or kind of house to because of your health?		Yes			□ №
	ii "Yes," ask: a. What condition couses this?			, 1 se h		
P-6.	is general, would you cay your health is axesticat, good, fair, or poor?			Excellent Fair	Good Poor	
	D RESPONDENT CARD TO P-T (FORM NHS-5-13-4) Living on this cord are several conditions. Ploase place on "X" oppose people would talk about each condition in an interview like this — that i	ito pack conditions, if they or some	which India	stas how freely or of their family	you think most y had the condi	other tion.
P-9.	e. Did you work of any time during the peat 2 weeks? If "No." sak P-8-; and P-9-ct	_	Yes			N ₀
	b. Even though you did not work during that time do you have n jab or be d. Were you looking for work or on level! from a job?	islness?	Yes			□ No
			Name and	eddrese		
P-9,	When is the name and address of the doctor or clinic you usually go to formedical advice or treatment?	n Pour own			· .	
	a. During the past 12 months about how many times did you son or visit or distinction and it or yourself	<u> </u>	Number of	times		
l	 Besides (the dector or clinis named above) did you see or visit any or during the past 12 months? 	ther doctor	☐ Yes		No (as to	P-10)
			Name and	address		
ļ	U "Yes," ask: The was this? (Enternance and address)					
<u>.</u>	c. How many timou did you see him dwing the past 12 months?		Number of	times		
	d. Did you see any other dectors during the past 12 menths?		☐ Yes		☐ No :00 to	P-10)
			Name and	address		
	If "Yes," ask: Who was this? (Enter name and address)					
	e. Here many times did you soo him during the past 12 months?		Number of	times		
P-10	. In conjunction with this surrey we sometimes need to obtain additional from modical and hespital records. In case you are solected as one of far whom we wish to obtain additional information will you please sign	hase persons	ME Slgues		RIZATION FOI	RM
	(present release - Form NHS-5-13-7) which allows up to consult your ho to account this information.	elth records		biff editet tods	-	
	E TO INTERNETURO. If the state of the state			a landele of a	elamaini and	ant .
	E TO INTERVIEWER: If Interview not yet completed for non-sample per itions 9-11 for non-sample persons. Otherwise, go to front of questionnal		evalues a l	शाहरू स्त्राहरू 	stieralstiki Sing	~+4

FORM NIKE-0-10-8 (9-4-8)

Physician Visit Record

wi <u></u>	or if Possible Complete Quarties & Palers Satisfact to San S	ly Dortor
Monit	er, If Possible, Complete Question A Beforn Patient is Seen S	ey votes
A. Potioni's L	ast Name First Name	Modical Encord Number
Declar's	Neme	Citals
Frovided That the Diagnosi Today By Either You o	nosis (Condition) or Impression (I.E., Diobeta fom (Joint Pain, Skin Rásh, etc.) Not a Port a s (Condition), impression, or Symptom Was Co	of Diagnosis (Condition) or Impression,
If There is No Diagnosis (Condition), Impressis		
and Frint Romson for This Visit:	Column I Frint Medical Term	Column 2 Print Medical Torm
t). Was the diagnosis (condition), impression, or symptom mentioned by you today? If yes, PRINT term used	YES NO 3	YES 1 NO 2
3). Was the diagnosis (condition), impression, or symptom mentioned by the potient today? If yes, PRINT term used	YES 1 NO 2	YES NO 2
4). When do you think the patient first became owere of the diagnosis (candition), impression or symptom specified in Question 1? a. Over 3 months ago b. During past 3 months but before today c. Today d. Other	Check one bex o. [Check she box 0.
5). How much emphasis did you give today to the diagnosis (condition), impression, or symptom specified in Question 17	1 Made a Point of It 3 Played It down 3 Neither of these	1 Made a point of it 3 Floyed It down 3 Neither of these
6). At some time during the post week was this diagnosis [condition], impression, or symptom ossociated with	Check one box in mack line YES NO DON'T KNOW	Oech one bez te ooch line YES NO DON'T KNOW
Morked or moderate poin Morked or moderate emotional stress One or more days in bed Other change in activity Other trouble (PRINT)		e. 3 3 b. 1 3 2 c. 2 3 3 d. 2 3 3
7). Action taken today related to the diagnosis (condition), impression, or symptom specified in Question 1. (Do not enter actions taken ONLY for purposes of a routine physical excumination.)	Obeck applicable barse	No action taken taday Check applicable besse
Action e. Medication b. Laboratory tests c. X-ray examination d. Feture visit to you e. Deferral to other M.D. f. Future haspitalization g. Future surgery h. Change in diet or driek l. Change in smaking i. Bed rest b. Other change in octivity l. Other action (FRINT)	70	Ordered to performed Maniford, but to whole we performed



Sample of Completed Physician Visits Record Summary

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APPENDIX II

DIAGNOSTIC RECODE³

Recode number	Title	International Classification of Diseases (Seventh Revision) inclusions as modified by NCHS
01	Tuberculosis (active) (inactive), all sites	001-007, 008, 009-S, 010-012, 014-019
02	Other chronic infective and parasitic diseases	020-029, 031-034, 036-039; 040-056, 057 excl. 057.1; 058-064; 070-074; 080, 082, 083.0, 084-096.8; 096.X, 100-138
03	Malignant neoplasms	140-205
04	Benign and unspecified neoplasms	210-239
05	Hay fever, without asthma	240
06	Asthma (with or without hay fever) (bronchial) (not otherwise specified)	241
07	Other allergic disorders not elsewhere classifiable	245 (242-244, 246-S not used)
80	Diseases of the thyroid gland	250-254
09	Diabetes (mellitus)	260
10	Anemia and other diseases of the blood and blood-forming organs, 3 mo.+	290-299
11	Vascular lesions of the central nervous system	330-334
12	Headache and migraine, chronic	354, 791
13	Specified mental disorders, not elsewhere classifiable	083.1, 083.2, 300-324, excl. 318.3
14	Ill-defined mental and nervous trouble, not elsewhere classifiable, 3 mo.+	327-S (318.3, 326.3, 326.4, 790.0, 790.2)
15	Diseases of the heart, not elsewhere classifiable (chronic rheumatic) (arteriosclerotic) (hypertensive)	410-443 (782.1, 782.2, 782.4)
16	Hypertension, not elsewhere classifiable, without heart involvement	444-447

³The recode categories 1-46 are the same as those used in the Recode 3 for the Health Interview Survey. Recodes 48-50 were included in Recode 47 in the original recode.



Recode number	Title	International Classification of Diseases (Seventh Revision) inclusions as modified by NCHS
17	Varicose veins	460, 462
18	Hemorrhoids	461
19	Rheumatic fever; arteriosclerosis, not elsewhere classifiable; other chronic diseases of the circulatory system	400-402, 403-S; 450-456, 463-468; 782.0, 782.3, 782.5-782.8, 782.X
20	Chronic sinusitis	513
21	Chronic bronchitis	502
22	Other chronic diseases of the respiratory system	510.0, 512, 514-517, 523-526; (480-493, 3 mo.+; 511, 518-522, 527, 783, if 3 mo.+)
23	Ulcer of stomach and duodenum	540-542 ⁻
24	Hernia (abdominal cavity)	560, 561
25	Diseases of the gallbladder, chronic	584-586
26	Other chronic diseases of the digestive system	Any in 530-539, 543-545, 551-553, 570, 572-583, 587, 784.5-784.7, 785.0-785.3, 785.5, 785.7-785.X (784.0-784.4, 784.8, 785.4, 785.6)
27	Disorders of menstruation	634
28	Menopausal symptoms, except psychosis	635
29	Urinary calculi; prostate disorders; other chronic genitourinary conditions	602, 604, 610-612; 620, 592, 594, 623; 591, 593, 600, 601, 603, 605-609, 613-617, 621, 624-633, 636, 637, 786, 789, if 3 mo.+
30	Chronic skin diseases	690-716, - if 3 mo.+ except 694
31	Arthritis and chronic rheumatism	725 (720-724 not used), 726.0, 726.1, 726.3, 727
32	Other chronic musculoskeletal disorders	730.1, 730.2, 744; - [731-733, 735, 738, 740-743, if 3 mo.+]
33	Fractures, 3 mo.+, no residual specified	800.9-829.9
34	Other injuries, 3 mo.+, no residual specified 4	850.9-999.9 ⁴
35	Severe visual impairment	
36	Other visual impairment	
37	Hearing impairments	
38	Speech defects	
39	Paralysis	
40	Absence, fingers, toes, only	·
41	Absence, major extremities	
42	Impairments (except paralysis and absence), back or spine	

⁴Unspecified residuals, 3 mo.+, of dislocations, sprains, strains, are coded to X70.9-X79.9, by site.



Recode number	Title	International Classification of Diseases (Seventh Revision) inclusions as modified by NCHS
43	Impairments (except paralysis and absence), upper extremities and shoulders	
44	Impairments (except paralysis and absence), lower extremities and hips with any other site	
45	Impairments (except paralysis and absence), multiple not elsewhere classifiable, and ill-defined, limbs, back, trunk	
46	Other impairments	
47	Other chronic conditions, not impairments and not in recodes 48-50	All other ICD code numbers which may be chronic conditions
48	Chronic diseases of eye, not impairments	370-388, if 3 mo.+; 753.0, pt. 753.1
49	Chronic diseases of ear, not impairments	390-396, if 3 mo.+
50	Chronic organic nervous system conditions	340-350, 353, 355-369; pt. 753.1; pts. 780, 781, if 3 mo.+





APPENDIX III

SAMPLING DESIGN

Introduction

The sampling design consists of the selection of the sample of respondents, the allocation of the sample to interviewers, and the procedures used in calculating the estimates.

Family Account Numbers and Medical Record Numbers at KFHP

The main devices used in selecting the samples were the Family and Medical Record Numbers, which are now discussed...

On enrollment in KFHP, a new subscriber is assigned a seven-digit number called the Family Account Number. There is one Family Account Number for the subscriber and the covered members of his family.

For the subscriber the Family Account Number is also his Medical Record Number. Other members of his family are also assigned individual Medical Record Numbers which are in sequence after the Family Account Number for all members covered when the subscriber joins and which are the next higher numbers for those joining the covered membership—e.g., newborn infants at a later time. Thus, the Family Account Numbers are the Medical Record Numbers of the subscriber, and each member of KFHP, subscriber or not, has his own seven-digit Medical Record Number. The records for each person include both his Family Account Number and his Medical Record Number.

Population

For purposes of this study the population consisted of all members of KFHP that met the following requirements:

- They were members during the 6-month period January through June 1960 and during the study itself.
- (2) They were at least 17 years of age at the date of interview.
- (3) They were not members of the Culinary Workers Union.

Selection and Assignment to Interviewers of the Interview Sample

Introduction.—The two main samples in the study were the PVR Sample, for which medical records were prepared, and the Interview Sample, a subsample of the PVR Sample for which interviews and comparisons with the medical records were made.

In this section the selection of these two samples, the weights of the elements of the Interview Sample, the interviewers' assignments, and the dates of beginning and terminating interviews are discussed.

Preliminary Sample.—The population from which the Preliminary Sample was drawn consisted of all subscribers to KFHP and the covered members of their families 15 years of age and over who were members of KFHP during the 6 months January through June 1960 and who were not members of the Culinary Workers Union.

The Preliminary Sample consisted of those with terminal digits 2, 5, or 7, and thus included approximately 30 percent of the population.

Physician Visit Record (PVR) Sample—allocation to five waves or sequences.—Using the data on number of visits to SCPMG of each person in the Preliminary Sample for the 6 months January through June 1960, the Preliminary Sample was classified into two strata—those who had made 0, 1, 2, 3, or 4 visits to SCPMG during the 6-month period and those who had made 5 or more visits during that period.

The PVR Sample consisted of an approximately 10-percent sample from the first stratum and an approximately 20-percent sample chosen from the second stratum, selected as indicated in tables I and II.

Table I. Sampling procedure for those making 0 through 4 visits during January-June 1960

Of those whose seventh digit (Medical Record Number) is	0 1 2 3 4 5 6 7 8 9	
Include in the sample those whose fifth digit	246807591 3	



Table II. Sampling procedure for those making 5 or more visits during January-June 1960

Of those whose seventh digit (Medic#1 Record Number) is	0	1	2,	3	4	5	6	7	8	9
Include in the sample those whose fifth digit is	2	4	6	8	0	7	5	9	1	3
	6	0	3	5	7	4	8	2	9	1

For convenience in initiating the PVR record keeping and in the interviewing, the sample was randomly allocated to five waves or sequences of approximately equal sizes (see table III). Record keeping began at 3-week intervals for the five waves.

The PVR Sample thus selected consisted of 4,922 names. These were allocated to five sequences or waves according to the sixth digits of the Medical Record Numbers as stated in table III. The staggered beginnings of the waves facilitated both the operations of record keeping at SCPMG and the interviewing by the Bureau of the Census later on.

Table III. Allocation of sample to sequences or waves

The sequence or wave having iden- tification number	Consists of all persons in the PVR sample having sixth digit (Medical Record Number)	The date on which PVR's began to be filled out for the sequence or wave was—
1 .	2 or 5	October 15, 1961
2	1. or 8	November 5, 1961
3	6 or 9	November 26, 1961
4	0 or 4	December 17, 1961
5	3 or 7	January 7, 1962

Interview Sample—determination of weights.—Approximately 11 months after the beginning of each wave, the number of visits of each person on the PVR Sample was tallied from the PVR's for that person. Using those data on number of visits, the Interview Sample was selected from the PVR Sample in accordance with table IV. Also, in table IV are given the weights resulting

from the combination of the 1960 visit strata and the study year visit strata.

Table IV. Sampling ratios and weights for interview sample

Number o					
January-June 1960	Approximately first 11 months of study year	Sampling ratio	Weight		
0-4	0	1 in 10	20		
0-4	1	1 in 3	6		
0-4	2 - 5	1 in 2	4		
· 0-4	6 and over	A11	2		
5 and over	0	1 in 10	10		
5 and over	1 and over	A11	1		

Allocation of the Interview Samble among areas and interviewers—dates of interviewing.—With minor modifications, the service area of the Kaiser Foundation Health Plan was divided into four areas, three of which were in Los Angeles and the fourth which contained Fontana and nearby areas. The four areas are those of the present study.

After the Interview Sample was selected for a given wave, the addresses of its members were located and the sample was thus distributed among the four areas.

For each of the four areas, the Interview Sample was alimated at random among the three questionnaires. Because of problems of cost and administration, however, interpenetrating samples were not used for interviewer assignments within all areas. In the three Los Angeles areas, the interviewers shifted from area to area in different waves. In the Fontana area, the interviewers were the same in all waves.

One year after the beginning of the PVR record keeping for a wave, the PVR record keeping terminated. Interviewing of that wave then began and continued for 2 to 3 weeks afterwards. The only change from the original plans occurred in Waves 4 and 5 in order to avoid the possibly higher noninterview rates between Christmas and New Year. The dates are given in table V.



Table V. Scheduled and actual interviewing dates, by wave

Wave	Schedu1	ed dates	Actual dates						
wave	Beginning	Ending	Beginning	Ending ¹					
1	October 22, 1962	November 10, 1962	As scheduled						
2	November 5, 1962	November 24, 1962	As scheduled						
3	November 74, 1962	December 15, 1962	As scheduled						
4	December 17, 1962	January 5, 1963	December 12, 1962	December 22, 1962 ²					
5	January 7, 1963	January 26, 1963	January 3, 1963	January 16, 1963					

In some cases, interviewing occurred after the stated ending date, but these were few in number.

Final changes in the sample.—During data processing, two changes were made in the sample to be tabulated. These were as follows:

- All persons under 17 years of age on the date of interview were eliminated.
- (2) It had been decided earlier that only one person would be interviewed in any household. Consequently if any household had two members or more selected for the sample, all but one were eliminated from the Interview Sample, but the information for the sample person not eliminated was duplicated and in one instance triplicated.

Interview Sample for Which PYR's

Were Not Used

In any record-check study for which special records such as the PVR's are being prepared, there are always the possibilities that these special records are incomplete or inaccurate or that the respondent has become aware of the study sufficiently to influence his reporting. Consequently a further sample, called Wave 6, was selected as follows:

- (1) The Wave 6 Sample was selected from persons in the Preliminary Sample who had not been selected for the PVR Sample but who had as a sixth digit of their Medical Record Numbers either 0, 3, 4, or 7—i.e., the sixth digits corresponding to Waves 4 cr 5.
- (2) A 10-percent sample was selected from those with 0, 3, 4, or 7 as the sixth digit of their Medical Record Numbers in accordance with table VII.

Table VII. First-stage 10-percent sample from those having sixth digits identifying sequences or Waves 4 and 5

Of those whose seventh digit (Medical Record Number) is	0	1	2	3	4	۔۔۔	0	7	8	9	_
Include in the first stage sample those whose fifth digit is	4	5	9	0	3	2	1	7	6	8	

(3) The resulting sample, called the PC Sample, then consisted of a subsample of one in six of those selected in item 2 who had made 0 to 4 visits to SCPMG during January-June 1960 and a sample of one in three of those who had made 5 visits or more to SCPMG during January-June 1960.

For the PC, or Wave 6 Sample, medical records (PC) were obtained by using the patient charts (PC) the study year. The persons in the PC Sample were not in the PVR Sample, and no indication of their being in the PC Sample could have reached the physicians and through them, the patients, because physicians were not involved in the preparation of the medical records (PC).

(4) The medical records (PC) were then used to select an Interview Sample that consisted of all persons in the PC Sample who had made at least one visit to SCPMG during the study year, and a sample of 1 in 10 of those was selected. Thus the weights for Wave 6 are 3, 6, 15, and 30.



 $^{^2}$ The change in dates for Wave 4 was primarily to reduce the amount of interviewing during the Christmas season.

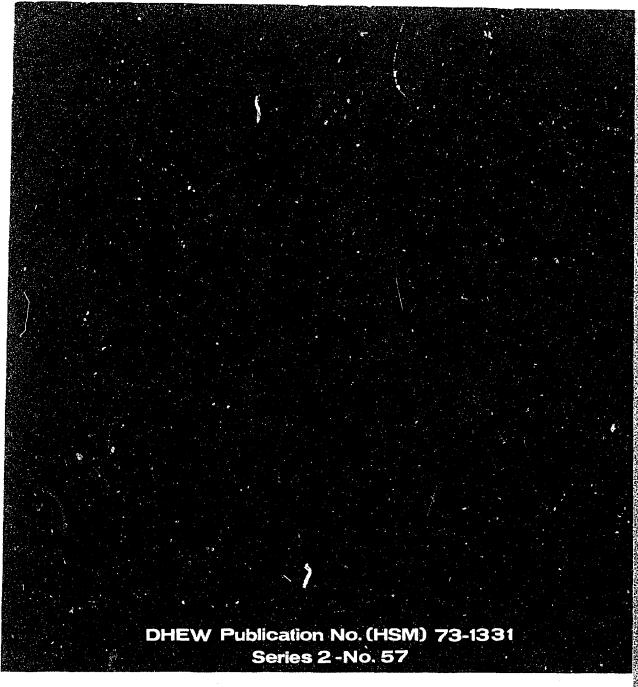
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